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AN

ACCOUNT

OF A

GEOGRAPHICAL AND ASTRONOMICAL EXPEDITION

TO THE

NORTHERN PARTS OF RUSSIA.

A CHART of the STRAIT between ASIA & AMERICA with the Coast of the TSCHUTSKI, laid down from ASTRONOMICAL OBSERVATIONS, made in the Icy Sea During the Years 1786 &c. to 1794.

Drawn by A. Arrowsmith

ICY SEA

Bear Islands

Coast not explored

Sabedei I.

TSHAOON BAY

Isle Kulouruk

Clutchenie

North Cape

Icy Cape

Cape Lisburn

Mulgrave

TSCHUTSKI

GULF of ANADYR

Gulf of Kotzebue

Bay of St Lawrence

Bay of Mechickma

Behring's Strait

C. of Wales or Kigtail

Kigtail

Kigtail I.

Hedge I. or Arsik

Norton Sound

Chacknoole Bay

Stuarts I.

Stephens

Shallow Water

NORTH AMERICA

Sinde I. of the Russians

Cherkey I.

Anderssons I.

Matoi or Gores I.

Shoal Nefs

Bristol Bay

Bristol River

St Paul I.

St Georges I.

Schumagina Is

Halibut Is

Tschernikowa I.

Trinity Is

Middletons I.

PRINCE WILLIAM SOUND

Montague I.

Hinchinbrook I.

Whittendag R.

L. Tschermongatoi

C. Greville

C. Barnabas

Two Hundred Fm

Kenai

Kadiak

Ugaga

Ugaga I.

Ugaga Bay

Ugaga R.

Ugaga Mountain

Ugaga Strait

Ugaga Sound

Ugaga Harbour

Ugaga Island

Ugaga Point

Ugaga Rock

Ugaga Reef

Ugaga Shoal

Ugaga Channel

Ugaga Passage

Ugaga Anchorage

Ugaga Cove

Ugaga Creek

Ugaga River

Ugaga Valley

Ugaga Hill

Ugaga Mountain

Ugaga Peak

Ugaga Ridge

Ugaga Plain

Ugaga Coast

Ugaga Shore

Ugaga Beach

Ugaga Bluff

Ugaga Cliff

72918

AN

ACCOUNT

OF A

GEOGRAPHICAL AND ASTRONOMICAL EXPEDITION

TO THE

NORTHERN PARTS OF RUSSIA,

FOR ASCERTAINING THE DEGREES OF LATITUDE AND LONGITUDE OF THE MOUTH OF THE RIVER KOVIMA; OF THE WHOLE COAST OF THE TSHUTSKI, TO EAST CAPE; AND OF THE ISLANDS IN THE EASTERN OCEAN, STRETCHING TO THE AMERICAN COAST.

PERFORMED,

By Command of Her Imperial Majesty *CATHERINE THE SECOND,*

EMPRESS OF ALL THE RUSSIAS,

BY COMMODORE JOSEPH BILLINGS,

In the Years 1785, *&c. to* 1794.

THE WHOLE NARRATED FROM THE ORIGINAL PAPERS,

BY MARTIN SAUER,

SECRETARY TO THE EXPEDITION.

LONDON:

Printed by A. Strahan, Printers Street;

FOR T. CADELL, JUN. AND W. DAVIES, IN THE STRAND.

1802.

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THE RIGHT HONOURABLE

SIR JOSEPH BANKS, BARONET,

A KNIGHT COMPANION OF THE MOST HONOURABLE ORDER OF THE BATH;

A MEMBER OF THE KING'S MOST HONOURABLE PRIVY COUNCIL;

PRESIDENT OF THE ROYAL SOCIETY,

&c. &c. &c.

THIS WORK

IS,

WITH GREAT DEFERENCE AND RESPECT,

INSCRIBED,

BY

HIS MUCH OBLIGED,

MOST GRATEFUL,

AND OBEDIENT SERVANT,

MARTIN SAUER.

PREFACE.

THE extraordinary diſcoveries of the ever-memorable circumnavigator Cook inſpired all Europe with an enthuſiaſtic deſire of being acquainted with the parts of the globe ſtill remaining unknown. Ruſſia, though more intereſted in theſe events than any other Power, being engaged in different purſuits, did not conſider the diſtant and barren regions belonging to her own Empire as of ſufficient importance to juſtify the expence and trouble of exploring them; until the genius of the country was completely rouzed by the animating intelligence communicated in the "Account of the Ruſſian Diſcoveries between Aſia and America, by the Reverend William Coxe," which the late Catherine the Second commanded to be tranſlated for her own peruſal, although the original Papers were in the Archives of the Admiralty at St. Peterſburg *.

* I am happy to find, that the author has collected very conſiderable materials for an enlarged edition of this work; which it is hoped he will not long withhold from the public, as the book is out of print, and cannot be procured.

The Court of Ruſſia was aſtoniſhed at the diſcoveries already made, by its own roving ſubjects, of iſlands, and of a continent, of which latter it had indeed an idea, but not the ſmalleſt notion of its extent or proximity to its own territories, and only ſuppoſed that it might be America. However, theſe voyagers did not aſcertain the geographical ſituations of places, nor explain the advantages that they offered to the country to which they belonged; nor, in ſhort, any thing more than their mere exiſtence.

The amazing extent of dominion acknowledging the ſovereignty of Ruſſia, independent of her late acquiſitions by conqueſt, became now the faſhionable topic of converſation at Court. Mr. Coxe, being at St. Peterſburg, took advantage of the favourable moment to ſuggeſt an Expedition, to complete the geographical knowledge of the moſt diſtant poſſeſſions of that Empire, and of ſuch northern parts of the oppoſite continent as Captain Cook could not poſſibly aſcertain. The learned Dr. Pallas, then in great favour, undertook to make the neceſſary repreſentations to Her Imperial Majeſty, who, well pleaſed with the hint, immediately approved of the plan drawn out by theſe two Gentlemen; and Count Beſborodko was, in conſequence, ordered to prepare a Mandate for the Admiralty: this was in the autumn of the year 1784. Mr. Billings, who had juſt received a Lieutenancy, ſaid, that he had been the

Aſtro-

Aſtronomer's Aſſiſtant in Captain Cook's laſt voyage; and he was therefore thought a proper perſon to conduct the enterpriſe.

Matters remained thus till the French Papers announced the departure of Count de la Perouſe, in July 1785, on a voyage of diſcovery. Upon this, the undertaking was reſumed with energy; and on the 8th Auguſt following, an Ukaze, or Mandate, ſigned by the Empreſs, was ſent to the Admiralty; on which were founded the INSTRUCTIONS to CAPTAIN BILLINGS, given in the APPENDIX to this Volume, No. V.

Every thing was procured that appeared likely to contribute to the ſucceſs of the enterpriſe; every imaginable encouragement was awarded to all the officers and men; and orders were ſent to the Governors, Commanders, &c. throughout the vaſt extent of Siberia, to give all poſſible aſſiſtance.

Captain Billings had permiſſion to ſelect his own officers, and to take ſuch hands as he judged neceſſary.

I was perſonally acquainted with Doctor Pallas and Mr. Billings, both of whom requeſted that I would accompany the Expedition as Private Secretary and Tranſlator; and, on receiving the

promiſe of permiſſion to publiſh my remarks upon my return, I agreed.

On the 10th March 1794 I returned to St. Peterſburg, in a very critical ſtate of health, which continued impaired during the whole of the following ſummer, and induced Doctor Rogers (now in London), the Doctor (Merck) and Surgeon Major (Robeck) of our Expedition, to form an opinion, that the ſeverity of a Ruſſian winter might prove of bad conſequences; and they recommended my viſiting a milder climate for a ſhort time. In conſequence of this profeſſional opinion, I petitioned Captain Billings, conformably to the eſtabliſhed rules of the ſervice; requeſting him to repreſent my ſituation to the Admiralty, and to procure me leave of abſence for about four months. This was on the 2d of September 1794; and on the 5th of the ſame month, TOWARD MIDNIGHT, *I received a very unexpected and unfavourable* ANSWER. It is not my intention, however, to enumerate hardſhips, or make a merit of ſufferings; but to give the beſt account I can of ſuch occurrences as immediately concern the Expedition, and as appear to me moſt likely to intereſt my Readers.

In the mean time I embrace this opportunity of acknowledging my great obligations to the undermentioned Gentlemen, then inhabi-

inhabitants of St. Peterſburg, for the particular marks of friendſhip which I received at their hands.

William Porter, Eſq.
Mr. William Jones.
Mr. Alexander Grant.
Mr. Laurence Brown.
Thomas Warre, Eſq.
William Wilſon, Eſq.
Alexander Shairp, Eſq.
John Booker, Eſq.
Doctor Simpſon.
Doctor Guthrie.
Mr. John Samuel Barnes.
— John Venning.
— William Glen Johnſton.
— John Glen Johnſton.
— Edward James Smith.

Upon my arrival in London, however, I experienced no leſs generous treatment. M. Garthſhore, M.D. F.R.S. and A.S. has my ſincere thanks for his protection; as alſo the Reverend William Coxe, and the Reverend London King Pitt.

Thomas Harvey, Eſq. who particularly aſſiſted me in Ruſſia, has ſtill heaped obligations upon me here; as have alſo Charles Grant, Eſq. and Doctor Rogers.

My warmeſt acknowledgments are likewiſe due to James Gibſon, Samuel Stratton, and John Rowlatt, Eſqrs. for their friendſhip and recommendation.

The many kindneſſes received from Mr. William Lotherington, and Mr. Edmund Rodd, my fellow-traveller from Ruſſia, will remain indelible in my remembrance.

During my travels, I was frequently neceſſitated to make notes on ſmall pieces of paper; thoſe I have faithfully tranſcribed; but in ſome inſtances I have been obliged to refer to memory; which circumſtance, added to the obliterated ſtate of ſeveral outlines traced with a black lead pencil, would have prevented my giving a chart of the two continents, had not Mr. Arrowſmith requeſted to ſee my remarks, which he compared with former diſcoveries in theſe parts; and, obſerving that the correſponding diſtances (particularly Shalauroff's chart) agreed with Captain Billings's aſtronomical obſervations in the Icy Sea, as did alſo the ſketches of the natives, it plainly appeared to him, that he could venture to lay down the Shalatſkoi promontory, and the whole coaſt between the eaſtern promontory of Aſia and the Kovima with

tolerable exactneſs; which proves the general fault in the Ruſſian charts, where the coaſt is carried conſiderably too far north. The ſituation of the iſlands between the two continents, as laid down in the chart, may be pronounced juſt; but I feel myſelf infinitely obliged to Mr. Arrowſmith for the pains he has taken. I am equally ſenſible of Mr. Alexander's merit in the judicious arrangement of the drawings and coſtumes, which has enabled me to preſent the Engravings, exact in their reſemblances, and executed in a manner highly pleaſing to myſelf. While indulging my own ſenſations in paying the tribute of reſpect and gratitude to thoſe who have befriended me, I ought not to overlook the kindneſs and liberality which I have experienced from my Publiſhers; but, as I am perſuaded that their behaviour to me is merely the ordinary courſe of their profeſſional practice, I ſhall reſtrain my feelings, and avoid the riſk of offending them by being more particular.

Upon mature deliberation on the extent and tendency of this Work, I think it neceſſary to call publicly on the Commander of the Expedition, and my brother officers, to correct any miſtakes in my narrative *, or to elucidate ſuch intricacies as may have

* My narrative of the voyages is taken from the journal written for Captain Billings, which I copied from the ſhip's journal kept by the Maſter Batakoff and his mates. I am apprehenſive, that ſome of the bearings are not perfectly correct; and I acknowledge that in many places I am not capable of ſaying whether the computed diſtances are geographical or German miles; both meaſures having been uſed by the original journaliſts.

ariſen

ariſen from my want of knowledge in the different branches within the limits of their profeſſional ſtudies. My object has been to travel with my eyes open, and to relate what I have ſeen in the ſimple language of truth.

Feb. 1802.

EXPLANA-

EXPLANATIONS

OF

Ruſſian and other Foreign Words made uſe of in the following Work.

BAIDAR; a term uſed at Ochotſk, Kamtſhatka, &c. for boats, whether large or ſmall. They are pointed at both ends, and conſtructed as follows: A keel and three frames, the lower to form a flat-bottom, the ſecond to ſupport the thwarts, and the third to ſerve for the gunnel; light knees and ground timbers are laſhed to the keel and the frames with whales' fins: The raw hides of ſea-animals are drawn over, to ſerve inſtead of ſheathing. They draw only a few inches water, carry a conſiderable burthen, are excellent ſurf-boats, and very uſeful in coaſting excurſions; as four men can carry one of them which admits of twelve rowers; at night they are turned keel upwards, and ſerve inſtead of tents. The ſmaller are quite covered, leaving only one, two, or three openings for the rower.

BAZAR, or RENOK; a market for vegetables, hard and wooden ware, &c. Any perſon is permitted in theſe places to hawk about old clothes, or whatever they may have for ſale.

CAMLEY, or KAMLEY; a garment in ſhape like a carter's frock, made of the inteſtines of marine animals, of linen, nankeen, or leather.

GORODNITSHIK; the mayor of a town.

GUBA; a bay.

KAMEN; a barren mountain; alſo a rock at ſea.

KREPOST; in Ruſſia, means a regular fort; but in Siberia, Kamtſhatka, and the iſlands, it is uſed for any place walled in; and is a name frequently given to a place which was intended to have had a fortreſs; as Petro Pavloſky Krepoſt, or the fort of St. Peter and St. Paul.

LAID, or LAIDENOI BEREG; a rocky ſhore covered at high water.

MAMMONTS' TUSKS are found about the Siberian rivers and the ſhores of the Icy Sea, and ſcattered all over the arctic flats. They are full as large as thoſe of the elephant, much more curved, and perhaps equal in quality. It appears that the animal is extinct.

MUYS,

MUYS, or MYS; a cape.

NOSS; a promontory.

OSTROG; a ſquare incloſure of paliſadoes, about eight feet high; replete with holes to point muſkets through: it generally has four entrances, with a tower upon each.

OSTROV; an iſland.

OZER, or OSER; a lake.

PARK; a garment made like the camley, but only of the ſkins of animals with the hair on, or with thoſe of birds with the feathers.

PEREDOFSHIK; a leader.

POLOG; a low tent uſed in a larger to ſleep and ſit in; alſo a thin covering over a bed to keep away flies and moſquitoes.

POOD; a Ruſſian weight of forty pounds, equal to thirty-ſix pounds Engliſh.

PRISTAN; a landing-place for goods.

PROMYSHLENIK; a hunter.

QUASS; a fermented liquor of plants, berries, roots, or meal, uſed as a drink.

REKA; a river.

RETSHKA; a rivulet.

SAZSHEN; a fathom of ſix feet.

SHEETIKI, or SHITIKI; a large boat ſheathed with plank, which is faſtened to the timbers with twiſted oziers; the interſtices are ſtuffed with moſs, inſtead of caulking; and the ſeams are covered with laths of about two inches wide, to prevent the waſhing out of the moſs; theſe are incloſed in the oziers. The name implies *ſewn*, as they are made without nails or pegs.

SLOBODA; a large village with a church.

SOPKA; a peaked mountain.

TOION, or TOYON; the Yakut name for chief, applied to the chiefs of all the heathen nations.

UST, or OOST; the diſcharge of a river.

UTSHENIK; a learner.

VERST; a Ruſſian mile, 104½ to a degree.

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CHAP. I.

Departure from St. Peterſburg.—Occurrences on the way to the City of Irkutſk.

In conſequence of a mandate ſigned by the late Empreſs of Ruſſia, Catharine II. directed to the College of Admiralty, and dated 8th Auguſt 1785, appointing Captain-Lieutenant Joſeph Billings to the command of "A Secret Aſtronomical and Geographical Expedition for navigating the Frozen Sea, deſcribing its Coaſts, and aſcertaining the Situation of the Iſlands in the Seas between the two Continents of Aſia and America, &c.*" the Admiralty confirmed the officers choſen by the commander, and ſupplied aſtronomical and nautical inſtruments, the charts and journals of all former navigators from the year 1724, and every other article conſidered as neceſſary.

* See the Introduction.

Early in the month of September, Lieutenant Saretſheff was diſpatched direct to Ochotſk, with our ſhip-builder and his aſſiſtant, to ſelect and fell proper trees for conſtructing two ſhips, according to a plan of Mr. Lamb Yeames, ſhip-builder, in which he had conſidered the beſt means of accommodating the officers and crew. The injunctions laid on Captain Billings to explore the rivers and the inland country of Siberia, prevented our going by ſea from St. Peterſburg; beſides, the ſhips were to remain as tranſport veſſels, or armed cruiſers, in thoſe ſeas.

Lieutenant Saretſheff had orders to the Governor-General of Irkutſk and Kolivan, appriſing him of the purport of the expedition, and requiring his poſitive commands to the Governor of Ochotſk to ſupply men and neceſſaries to forward the buſineſs.

The whole party was ſent off in ſmall detachments by the middle of October; on the 25th day of the ſame month, 1785, I departed from St. Peterſburg, with Captain Billings and our ſurgeon, Mr. Robeck, at eight o'clock in the evening, in very rainy and windy weather; which made the roads ſo indifferent, that we did not reach Moſco till the 5th of November at eight o'clock in the morning. I forbear to make any remarks reſpecting the road, the villages, &c. as every circumſtance is well deſcribed by Mr. Coxe; my intention is, to be more particular when I arrive at places leſs known.

In this city Lieutenant Hall, the ſecond in command, was ordered to wait the arrival of Captain Billings; the other parties proceeded by Kazan to Irkutſk.

We

We purchaſed a great number of articles neceſſary for our travels; received medicines for the uſe of the expedition, from the Government General Repoſitory of Drugs; and forwarded our baggage to Kazan by Lieutenant Hall, who left Moſco the 10th of December; and on the 15th, at four o'clock in the afternoon, Captain Billings proceeded with our head ſurgeon, (Mr. Robeck,) Sturman Batakoff, and myſelf, attended by ſoldiers in carriages and on ſledges.

The road was barely covered with ſnow; and on the 18th we arrived at Paulova, containing about 2500 houſes, ſome few very elegantly built of brick, and five churches. This may be conſidered as the Birmingham of Ruſſia, and is, with all its inhabitants, the private property of Count Sheremetoff. The people are all manufacturers of hardware and traders, have an immenſe number of well built veſſels, and carry on a very extenſive trade in the Caſpian Sea. This (Slobôda) large village is ſituated on the river Oka, near its diſcharge into the Volga. We here purchaſed knives, ſciſſars, buttons, &c. as preſents to the natives of ſuch places as we might touch at in our voyage.

At the diſtance of 625 verſts from Moſco we entered an oak wood, chiefly of middle-ſized trees, near the Tſheremeſe village of Scartog, travelled 75 verſts through it, and arrived on Monday the 22d of December, about eight in the evening, at Kazan, where we found our whole party in good health and ſpirits.

Kazan is a regular and well-built city on the river of the ſame name, three verſts from its diſcharge into the Volga, and ſituated in latitude 55° 43′, and longitude 49° 15′ E. from Greenwich. The inhabitants, who are chiefly merchants, conſiſt of Ruſſians,

Tartars, and Armenians, and carry on a very conſiderable trade.

Numbers of noblemen reſide here in the vicinity of their eſtates; and others, who find motives for retiring from the capital, alſo chooſe this city for their place of reſidence. We obſerved that the greateſt harmony reigned among them, with unbounded hoſpitality, eſpecially to us as travellers. It becomes us particularly to acknowledge the great kindneſs that we experienced from the Preſident of the Admiralty and Director of the Dock Yard, Admiral Zſhemtſhuzſhnikoff, whoſe houſe we made our head quarters and general rendezvous. This nobleman was in England about the year 1770, engaging tranſports for the Ruſſian fleet under the command of Count Orloff, and was very much attached to the Engliſh. At his friendly manſion we uſhered in the year 1786, and in our company he made a point of drinking the health of the King of Great Britain, and ſucceſs to his fleets. The recollection of kindneſſes that he received in England gave him enthuſiaſtic pleaſure, ſomething, I believe, like what I feel at this inſtant on recollecting the favours that I received from him. His table was always profuſely covered, and his wines were of the beſt flavour.

On the 6th of January, after attending the ceremonies of the day (as deſcribed by Mr. Coxe), we dined with the Governor. The ſtrange mixture of his company I think worthy of notice. The biſhop of Kazan (a very learned divine, a great friend to the poor inhabitants, and the founder of a ſchool for their children), the Mahometan Chief Prieſt, a German Lutheran Prieſt, with ſeveral natives of Ruſſia, England, France, and Italy; and, though the good humour of the company was not increaſed by the

the luxury of the table, or the excellence of the wines, it did not ſuffer by any reflections on our hoſt's want of generoſity.

All the neceſſaries and ſome of the luxuries of life are in great plenty in this city, and at a very moderate price.

The command was diſpatched from hence as follows:

1ſt Party,	31ſt December,	6 Kibitki ſledges.
2d ——	2d January,	6 Do.
3d ——	4th Do.	6 Do.
4th ——	7th Do.	6 Do.

with orders to make the beſt of their way to Irkutſk.

On the 9th of January Captain Billings reported to the Admiralty the ſtate of his command, and requeſted a freſh ſupply of barometers, every one that we had with us being broken, owing to the bad ſtate of the roads. One of our medicine cheſts alſo broke through the ice in croſſing the Volga, which ſpoiled a great part of the contents; and theſe, of courſe, our ſurgeon required to be replaced and ſent to Irkutſk.

On Saturday the 10th we left Kazan: the roads were now good, and well covered with ſnow. At the diſtance of 18 verſts we entered a wood of very fine oak *, through which we travelled 34 verſts. The face of the country continued hilly and moderately wooded with fir, common pine, and birch. The in-

* On my return by this road, in January 1794, I was ſurpriſed at ſeeing the country cleared of every tree, and lying waſte; not even a buſh being to be ſeen; which was pretty much the caſe with the wood near Scartog on the other ſide of Kazan.

habitants are Ruſſians, Tartars, and Votiaki. The Tartars are Mahometans, and very clean in their perſons and habitations. The women are, in general, very handſome, and dreſs extremely neat. They are induſtrious, honeſt, and peaceable; and, under their management, a piece of ground of a given extent will produce nearly twice as much as the Ruſſians obtain from an equal quantity. All the villages are built in vallies on the borders of rivers, ſurrounded with gardens and cultivated fields.

On Monday the 15th we reached Kungur, a city containing 1800 wooden houſes on the eaſt ſide of the river Tulva, latitude 57° 20′, longitude 56° 50′ E. 2160 verſts from St. Peterſburg: and here the Virchoturien mountains commence.

Atchinſky Krepoſt, on the confines of Siberia, is 88 verſts beyond Kungur; and in this neighbourhood are the iron works of the different rich proprietors living in St. Peterſburg, &c. The inhabitants appear particularly ſtrong and healthy; their houſes are very clean; and I ſaw ſeveral men who were not very infirm at between 80 and 90 years of age. The woods that we had hitherto paſſed conſiſted of fir, common pine, poplar, aſp, and birch: here we obſerved alſo the larch pine.

On the 17th January we arrived at the famous city of Ekaterineburg, on the Uralian chain, through which the river Iſet flows, and works the gun, anchor, and iron foundries, ſaw and coining mills, and lapidary, &c. belonging to Government. This city ſtands in latitude 56° 50′, longitude 60° 17′ 10″, and contains about 2000 houſes, ſome very elegantly built of ſtone, five churches, ſchools, &c. Proviſions are here extremely cheap; fiſh, ſturgeon, beluga, and large quabs (nalime) 20 copeaks the pood, beef

50 cop.

50 cop. rye flour 32 cop. * The laſt article, they ſaid, was very dear, having had but a ſcanty growth for the laſt three years. The poorer ſorts, and convicts, of which only a few work at the mines, find a plenteous and cheap ſupply of the ſalted omul, which appears to me to be a ſpecies of herring, but twice as large as the ordinary ſort. The circumjacent mountains afford much intereſting entertainment to a naturaliſt, whoſe reſearches are frequently rewarded with new diſcoveries of variations in the works of nature. Excluſive of minerals and malachites (the largeſt ever heard of was found here, weighing 107 poods, or 3852 pounds weight,—Pallas), here may be ſeen an aſtoniſhing variety of white rock cryſtal, with capillary ſhörl of different colours; that with the red was called by Pallas the hair of Venus; the green was named by Guthrie Thetis's; the flaxen, Cupid's; the black, Proſerpine's; and a dark topaz, containing white ſhörl, Saturn's hair; amethyſt, topaz, the Siberian diamond, jaſper ſtriped and plain, porphyrys, &c.

We now found the face of the country more level, and the woods very much on the decreaſe, and pretty well inhabited by Tartars and Ruſſians; the former of whom, beſides cultivating the earth, make and ſell very neat worſted carpets.

On Thurſday the 22d we arrived at Tobolſk †, containing 2300 houſes and 23 churches, chiefly of wood, latitude 58° 12′ 20″, longitude 67° 19′ 10″, oppoſite the diſcharge of the Tobol

* A copeak may be reckoned about a farthing; a pood is 36 pounds.

† This city was reduced to aſhes in the year 1787; but on my return (in 1794) it was rebuilt on a regular plan; the ſtreets wide, with churches, and a great number of houſes, of brick. Its ſituation is low, backed by a riſing ground which projects over the Irtiſh; and the fortreſs is built on its point.

into

into the Irtiſh. It is a place of very conſiderable trade, frequented by Samoyeds, Tartars, Ruſſians, and Siberians; and proviſions here are rather cheaper than at Ekaterineburg.

I obſerved that we had now croſſed the whole of the Uralian chain of mountains.

Bad weather detained us here three days, during which ſhort ſtay we experienced the hoſpitality of the Governor General Kaſhkeen.

On Sunday the 25th we left Tobolſk, and found the country low, marſhy, and woody, but well inhabited as far as the Deſert of Baraba (Barabinſky Step), ſituated 3512 verſts from St. Peterſburg, and 570 verſts in extent. This was not inhabited, but the Empreſs about ten years ago built villages all over it at the diſtance of 20 to 25 verſts. The whole extent almoſt is low and boggy; ſome elevated ſpots, however, produce ſtunted birch, bruſhwood, and a little graſs. The weſtern half is well watered by the lake Kamyſhova, the rivers Om, Tartas, and Kain. The latter is about the midway; and here the town of Kainſk is built for the protection of travellers. It contains 125 houſes and a church, all of wood. The inhabitants of all the villages are convicts. The eaſtern half of the deſert is almoſt deſtitute of wood; nor is there any water, except in ponds, fetid even at this ſeaſon. Wells are dug, but theſe prove ſalt and bitter. The people, therefore, melt ſnow in winter, and collect rain in ſummer. The moſt extreme poverty, dirt, and miſery prevail over the whole deſert, which is terminated by a riſing ground, where Nature ſuddenly aſſumes the moſt luxuriant change, preſenting a woody country, replete with meadows, corn fields, and well built

built villages, inhabited by clean, healthy, and affluent Siberians.

On the 4th of February we reached Tomſk, a city containing about 1500 houſes (latitude 56° 29′, longitude 85° 3′), on the river Tom. Here we ſaw Mr. Patrin, the gentleman appointed by her Imperial Majeſty, on the recommendation of the very learned Dr. Pallas, to accompany our travels as naturaliſt and botaniſt. He was on his return to St. Peterſburg, with a view of retiring to France on account of his health, the ſtate of which rendered his longer reſidence in theſe parts dangerous, and bereaved us of an invaluable companion.

The inhabitants of theſe parts are farmers, graziers, and carriers; and have a famous breed of horned cattle, with which, as well as with butter, they ſupply all the northern and eaſtern diſtricts of the empire. They are wealthy, hoſpitable, healthy, and clean, and live under no controul of individuals, only paying a trifling ſum to the Captain of the diſtrict, for Government. The Siberians throughout are more induſtrious and independent than any Ruſſian peaſants, live more comfortably, and drink home-brewed beer in addition to quaſs. The women are remarkably clean; and I never entered any houſe in travelling, night or day, but I found them ſpinning flax. I have frequently aſked them why they worked all night; and always received one general anſwer, "that the days were ſhort." Inſtead of candles, they burn laths of birch wood, which they call lutſhinka; a portable ſtick, about five feet high, with a foot to it, ſerves as their candleſtick; three nails are driven into the top, forming a triangle; the lath is ſtuck between the nails obliquely, and burns about four or five minutes: but when they have gueſts they burn a candle, the nails ſerving as a ſocket.

Their neighbours, to the ſouth-eaſt, are ſome tribes of Mongals extending to China; and a private trade is carried on, through this channel, by a few of the more intelligent Siberians.

On the 14th February we arrived at Irkutſk, in a froſt of 18° of Reaumur, and found all the Command ſafe. The Governor General Jacobi being abſent, a courier was diſpatched to him at Barnaul, to inform him of our arrival.

On the 15th, in the morning, the thermometer indicated 28° below 0 of Reaumur for about two hours, when it roſe to 20° and 18°: 30° is the greateſt extremity of cold ever remembered here.

CHAP.

CHAP. II.

A ſuccinct Account of our Tranſactions at the City of Irkutſk—State of our Command—Additional Hands taken there.

We were now arrived in the capital of Siberia, and entering on the firſt ſcene of real buſineſs, of a nature more extenſive than this city ever before experienced. Every neceſſary article for conſtructing two ſhips of 85 feet keel was to be received here, except timber: iron, cordage, ammunition, proviſion, liquor, ſtores; clothing from head to foot, on a moderate computation, for five years; candles, ſoap, and every the moſt trifling commodity neceſſary for each individual officer, over and above the ordinary allowance for a Command of three hundred men, to be tranſported by water and land upwards of four thouſand verſts. It was likewiſe neceſſary to ſtow every article in the moſt ſecure method in packages, weighing only $2\frac{1}{2}$ poods each, or 90 pounds Engliſh weight, to facilitate their tranſport on pack-horſes from the city of Yakutſk, both to Ochotſk and to the river Kovima, where we had to build a veſſel of 50 feet keel, with boats and baidars, for navigating the Icy Sea.

No time was loſt in ordering the inſtruments in very great abundance, with an extra number to ſerve as preſents to ſavages. Some hands were ſent, under the command of an officer, to build veſſels at Katſhuga Priſtan, on the river Lena, to tranſport the command to Yakutſk, &c.

On the 26th of February we began to receive hatchets, hammers, and every other inſtrument uſed by artificers in a dock-yard.

At half paſt three o'clock in the morning of the 3d of March, the city experienced a ſmart ſhock of an earthquake, which laſted about three ſeconds, but was not attended with any bad conſequences. Earthquakes here are frequent, but not violent.

On the 5th the courier returned from the Governor General, with orders for the Governor to comply with all the demands of the expedition. To forward the buſineſs, Captain Billings increaſed his Command, agreeable to his inſtructions. From St. Peterſburg it conſiſted of,

Captain Joſeph Billings, Commander;
——— Robert Hall;
——— Gabriel Santſheff;
——— Chriſtian Bering;
Skipper Affanaſſy Bakoff, to rig the veſſels, and take charge of all ſtores;
Steerman Anton Batahoff, } Maſters;
——— Sergey Bronnikoff, }
Surgeon Mich. Robeck;
——— Peter Allegretti;
Drawing-Maſter Luke Varonin;
A mechanic;
Two under ſhipbuilders;
Two ſurgeons' mates;
One maſter's mate;
One boatſwain;

Three

Three Court Yagers, for ſtuffing birds and beaſts;
Eight petty officers;
Seven ſoldiers, Streltſi;
And myſelf, as private ſecretary, and journaliſt:
In all thirty-ſix.

The following hands we engaged here:

Vaſſiley Diakonoff, } for keeping accounts, and tranſacting the
Fedor Karpoff, } writing buſineſs for the command, in Ruſs;

Lieutenant Poloſoff, of the army; [He had occupied a place of truſt in Igiga, and was recommended as a uſeful hand among the Tſhutſki.]

Six petty officers from the Navigation School at Irkutſk;

Three men for conſtructing leather boats, or baidars, for river navigation;

One turner;
One lockſmith;
Fifty Coſſacs, and one Sotnik;
Two drummers:
In all, ſixty-nine, in addition to the St. Peterſburg Command.

March 7.—The perſons compoſing the Command were advanced a rank, agreeable to the Imperial mandate.

All hands were now employed in packing up inſtruments, &c. in boxes, which were afterwards covered with canvas, pitched all over, and ſewn up in ſoal leather, to prevent water from ſpoiling the contents in time of rain, and in fording of rivers. The leather was ultimately deſigned for ſhoes and boots.

March

March 16.—The ice of the river Angara broke up, and we had fine and mild weather.

April 16.—The weather being favourable, Captain Billings erected his aſtronomical tent at the ſouth-eaſt extremity of the city; and, by many ſets of obſervation of the ſun's and moon's diſtance, his longitude proved 103° 46′ 45″ eaſt of Greenwich, latitude 52° 16′ 30″.

Irkutſk contains 2500 houſes, chiefly of wood, 12 ſtone churches, a cathedral, and two monaſteries; beſide which, there are ſeveral public buildings, an hoſpital, an inoculating houſe, a ſeminary for the ſtudy of divinity, a public ſchool, a library and collection of curioſities; alſo a theatre, of which the performers are all young men and women natives of Irkutſk. The repreſentations are chiefly confined to national pieces, which they get up with aſtoniſhing propriety; and they have very excellent muſicians belonging to the different regiments, beſides the band of the Governor General.

This city ſtands on a low ſpot of ground, oppoſite the diſcharge of the Irkut into the Angara. The latter river bounds it to the weſt; the Ooſhakofka to the eaſt and north-eaſt; and to the ſouth, high, pleaſant, and fertile land.

The ſtreets are ſtraight and uniform. The ſhops are in the heart of the city, an elegant ſquare pile of brick building, under piazzas which ſupport warehouſes. The butchers' ſhops are in the eaſtern extremity, where the ſlaughter-houſes are built over the Ooſhakofka. Near this is the fiſh-market; alſo a bazar, or renok, for vegetables, corn, bread, butter, flour, pedlary, and wooden ware.

The latter is a place of reſort of the Burati, who hawk about ſables, martins, otter, and other furs. I calculate the number of inhabitants at about 20,000. The merchants are numerous and affluent; and a conſiderable trade is carried on with the Chineſe, which is ſo well deſcribed by Mr. Coxe, that all I can add to his remarks on the ſubject is, that the prices of articles are now about three times as high as when he mentioned them. Here the aſſortments of furs are made, which are brought from America, and the northern parts of the empire, in the following manner: The inferior and worſt coloured ſables, the fox ſkins, from the Aleutan iſlands; the ſecond ſort of ſea otter, river otter, &c. are allotted to China *. Such as are defective and weak in the hair, as alſo inferior ſorts, are ſent to the fair at Irbit; and the very beſt are ſent to Moſco and Makaria, where they meet with ready purchaſers among the Armenians and Greeks.

The works belonging to this place are, a glaſs-houſe under the particular inſpection of the learned Profeſſor Laxman, ſituated near the Baikal lake; a diſtillery, about 60 verſts north of the city, in which the annual average quantity of brandy made is 60,000 ankers; ſalt works at three ſprings, which ſupply the neighbouring country; a cloth manufactory, where eleven looms were in conſtant employ, but now only one is at work for very coarſe cloth: this is the property of the merchant Siberakoff; the others belong to government.

On the 28th April, we began ſending off the Command and articles to Katſhuga Priſtan; and by the 19th May all were diſpatched from hence.

* The Chineſe colour ſables, and other furs, ſo artfully, that the deception is not obſervable: in conſequence, they will only pay a low price, and always give articles of an inferior quality the preference.

Imme-

Immediately on our arrival at Irkutſk, Profeſſor Laxman offered to accompany the expedition as naturaliſt and botaniſt: Captain Billings, however, did not accept the offer; and it was only the day before his departure that he ſent me to Dr. Merck (belonging to the hoſpital here) to aſk if he would go with us in that capacity, which he immediately agreed to, but confeſſed that he was not a proficient. Mr. John Main, an Engliſhman (alſo a medical gentleman), volunteered to go as his aſſiſtant. Thus were matters ſettled; and all the neceſſary articles and books given by Profeſſor Pallas for Mr. Patrin, were now ordered to the diſpoſal of Dr. Merck, who left Irkutſk with us the very next day.

Before I quit this place, which, according to the information of my acquaintance, is the laſt of any conſequence that I am likely to behold till my return, I ſhall attempt a ſummary ſketch of its inhabitants, and their mode of living.

Lieutenant General Ivan Varfolomitſh Jacobi, Governor General, poſſeſſing the powers of Viceroy;

Major General Lamb, his Aſſiſtant Governor; and

Mr. Medvedeff, a very rich individual, keep open houſe, and give a dinner and ball each once a week. The remaining days are paſſed in viſiting other opulent inhabitants, either in conſequence of invitations, or in the way of friendly call. The ſet is never broken, though ſometimes divided into ſeveral branches; but they are always united at every invitation. At dinner a band of muſic induces an harmonious circulation of the glaſs.

The ſociety eſtabliſhed, and the liberal hoſpitality of the firſt order of inhabitants, is ſuperior to that in any part of Ruſſia, and really

really ſeems to infuſe a ſpirit of conſequence into the minds of the lower ſort of people. I think that their ſchools and theatre contribute much to this; but moſt of all the tutors to the children of the more opulent. Theſe generally conſiſt of Poles, Swedes, French, and ſome of the Jeſuitic order, who have been under the neceſſity of travelling.

Numbers of mechanics, artiſts, and artificers of great abilities, whoſe exertions were ſelfiſh in Ruſſia, here exert themſelves for the benefit of the community; and, as merit is the chief introduction to independent ſociety, ſo all who poſſeſs it meet with liberal encouragement; and, unleſs their characters are ſullied by acts of criminality, they are countenanced and ſupported. The unfortunate are generouſly diſtinguiſhed from the villainous.

The officers here, both military and civil, are very numerous; the former, in conſequence of this being the ſeat of government in the vicinity of the Chineſe and Mongal territories; the latter, on account of the numerous courts of juſtice, and the neceſſary diſtributions to be made for the vaſt extent of its juriſdiction. I ſhall rate theſe in two claſſes; for rank is only a ſecondary recommendation here: the gentleman, who behaves himſelf with propriety, though poor, is completely independent, and every houſe is open to him; while the worthleſs are only attended to in the execution of their duty, and then with great reſerve.

In this town there are neither inns nor coffee-houſes; but no ſtranger, who behaves himſelf with common civility, will ever be at a loſs for a home. I had very good quarters allotted me by Government, in which I had only reſided a few days, when Brigadier General Troepolſky invited me to accept of apartments and

attendants in his houſe: his lady repeated the invitation, which I begged they would allow me to refuſe. They then ſent me every neceſſary to my lodging, which really compelled me to accept their firſt offer, to ſave them greater trouble. Their manſion was ever after my home; and their friendſhip will always remain indelibly impreſſed on my mind. All kinds of food are cheap, as are ſpirituous liquors and home-brewed beer. Wines are dear. Many luxuries are imported from China; and ſilks, cottons, linens, furs, nay Engliſh cloths, are moderate.

Throughout the whole of Siberia, hoſpitality prevails in the extreme. A traveller is perfectly ſecure on the road, and certain of a hearty welcome wherever he puts up, let the cot be ever ſo homely. But whether this hoſpitality will continue when they arrive at a certain ſtate of refinement, to which they ſeem advancing with incredible haſte, remains for future times to diſcover; as alſo whether the expanſion of ideas may not lead to the extenſion of territory, and other formal eſtabliſhments.

In the morning of the 10th of May we had a heavy fall of ſnow, which lay on the ground two hours. By noon it cleared up; and in the afternoon, at ſix o'clock, Captain Billings, Dr. Merck, and myſelf, left Irkutſk, accompanied by Count Manteuffel, Mr. Haak, &c. The Governor General had prepared a farewel ſupper for us at his villa, 18 verſts from the city, where we paſſed the night. The next morning, at ſix o'clock, we took leave of our friends, with a moſt grateful ſenſe of the multiplicity of favours that we had received during a ſtay of three months. Our road lay acroſs the Buratſkoi Step, ſo called from the immenſe herds of cattle and horſes that the Burati graze here. Theſe are of the Balagan tribe, and, with the Chorintſi,

ſeem

ſeem outcaſts from the race of Mongals; for they have no lamas, nor letters, but are complete demonolatrians, and conſult their ſorcerers: all other tribes of Burati are intelligent people, have lamas, or prieſts, and are ſtrict obſervers of their religious rites and ceremonies; their worſhip being performed in the Tungutſki language, in which all their laws are written. They have different places for particular rites. The ceremony of an oath, or rather a curſe, to prove their innocence, if ſuſpected of a crime, is performed on ſome ſelected mountain: formerly, a very remarkable one ſituated near Kiachta, and called Burgutta, was their favourite place; but by a late treaty this mountain fell to the lot of the Chineſe, which cauſed great diſſatisfaction to the Burati, and was followed by deſertions.

We arrived on the 12th, at two in the afternoon, at Katſhuga Priſtan, a village containing only 15 houſes, ſituated on the river Lena, in latitude 53° 26′, longitude 107° 2′, 230 verſts from Irkutſk. Here we found nine barks of from 10 to 15 tons burthen, ready to convey us and our baggage to Yakutſk. The number of packages amounted to 2600, excluſive of ſail cloth, cordage, &c. not yet ſent from Irkutſk; to forward which we left behind us Sturman Bronnikoff. Our guns, anchors, &c. were not yet arrived, nor did we expect them till the next year.

On the 14th May, in the evening, we had loaded all our goods, and got every thing ready for our departure down the river.

CHAP. III.

Departure from Irkutſk.—An Accident.—Remarkable Cave.—The River Lena and its Tributaries.—Arrival at Yakutſk.

On Friday the 15th of May, at eight in the morning, Captain Lieutenant Hall ſet ſail with three barks. At five in the afternoon, Captain Billings followed with the reſt, giving the charge of them to Captain Lieutenant Bering. He then embarked in a dosſhennik * with Dr. Merck and myſelf, Count Manteuffel ſtill accompanying us. The night was very dark, with thunder, lightning, and heavy rain. At midnight we arrived at Vircholenſk, (an oſtrog containing 100 houſes, and two wooden churches, famous in theſe parts for its manufactory of coarſe worſted ſtockings and night-caps) 35 verſts from the place of our embarkment, and made faſt to the ſhore. Captain Bering, a-head of us, ran foul of a merchant's bark, and ſunk in nine foot water cloſe to ſhore. We employed all hands in unloading the cargo, and found that, notwithſtanding every precaution uſed, the boxes were not water proof. The moment the accident happened, the pilot leaped overboard, and ſwam to ſhore.

At ſeven in the morning of the 16th, Count Manteuffel went, with Dr. Merck, to ſee a remarkable cave, 15 verſts from hence.

* A veſſel calculated for accommodating a family, with baggage, down the Lena. It contains three cabins: one at the forecaſtle, with a ſeparate entrance; one in the midſhips, and the other aſtern. It is built of boards without a keel, flat bottomed, about 35 to 40 feet long; rows and ſteers with long ſweeps, two men to each; is furniſhed with a maſt, and one ſquare ſail, and named from *doſok*, a board.

They

They returned at two in the afternoon, and gave the following account of their expedition.

The mountain is called Khacharchai by the Burati, and the cave is ſituated about the middle of the aſcent, ſurrounded by large trees of pines and birch. It is about one yard high, and half a yard wide; and the outward borders, as alſo the inſide, as far as the eye can reach, are covered with a thick coat of ice. A thermometer in the ſhade was 14° above the freezing point; while another, placed about a fathom within the cave, ſtood 4° below it. A pretty freſh wind iſſues from the cave, which, according to the account of the guide, freezes all the ſummer, but thaws in winter, when a warm vapour ſupplants the chilling breeze. Among a great variety of plants near the place, the Rhe Rhaponticum is the moſt prevalent. About half-paſt three this afternoon we took leave of Count Manteuffel, who returned to Irkutſk.

Mr. Bering's bark being repaired, and reloaded from two other barks, which were left under the care of Mr. Main to wait the drying of the damaged articles, Captain Billings immediately proceeded with the other four.

I ſhall not weary the reader's patience with a circumſtantial account of every day's progreſs; as I mean to ſtate, in an Appendix, every ſtage that we paſſed from Moſco, noting the number of houſes, and of verſts, as alſo the time of our arrival and departure.

Continuing the plan that I at firſt adopted, I ſhall give a very brief account of this river, to avoid fatiguing my readers, and to encourage

encourage them to follow me through all the mazes of my progreſs.

The Lena takes its riſe from an inconſiderable lake ſituated between the mountains near the Baikal, about 100 miles weſt ſouth-weſt of Katſhuga Priſtan (wharf). It flows in a gentle and uninterrupted ſtream, though here and there impeded by ſhallows at a late ſeaſon, to about the diſtance of 300 miles from its ſource, when it deepens conſiderably. The direction is very winding, but pretty uniformly eaſt north-eaſt to Yakutſk, and nearly north from thence to its diſcharge into the Icy Sea, about the latitude 71° 30′, and longitude 127° eaſt of Greenwich, after a courſe of 3450 geographical miles. The appearance that it aſſumes is continually varying; in ſome places mountains bound the channel on both ſides, clothed to the ſummit with ſtately pines; in others, they are barren, projecting into the river, and turning its courſe; taking fantaſtic ſhapes, reſembling ruins of large buildings, towers, and churches; the chaſms overgrown with hawthorn, currant-buſhes, dog-roſes, &c. In ſome places the mountains retreat inland for miles, forming a back ground to extenſive plains, and expoſing a miſerably built town, ſurrounded with cornfields, gardens, and paſture grounds, with a few herds of cattle grazing; theſe openings are frequent at unequal diſtances of 5 to 40 verſts from each other, and are always occupied by villages as far as Olekma, 1800 verſts from Katſhuga: all beyond is deſolate, except a few huts inhabited by convicts, who have the charge of horſes for the poſt, and the towns of Pokrofſky, Yakutſk, and Giganſk. The beſt of them is only a collection of huts inhabited by prieſts and their attendants, officers and Coſſacks, who teach obedience, and enforce the payment of tribute from the wander-

ing tribes of Tartars that infeſt the neighbourhood, and of whom I ſhall have occaſion to ſpeak hereafter.

The rivers that flow into the Lena are,

The Ilga, - 170 verſts from Katſhuga.

Koot, - 469——Very near the eſtuary of this river is a ſalt lake, which is very ſhallow; and works, the property of the preſent Iſpravink of the diſtrict, at which one boiling produces 1080 pounds weight of ſalt.

Marakofka, - 601.

Makarova, - 690.

Kiringa, - 778.

Vitima, - 1178.——This river flows from a lake eaſt of the Baikal. It is nearly equal to the Lena, in width, depth, and extent; and is famous for ſables, lynx, fox, ermine, ſquirrel, and deer.

The ſables of this river, and of the Momo, which falls into it 300 verſts from the diſcharge, are very valuable, and of a ſuperior quality. Numbers of Tungooſe travel about here on the chace. Three verſts up this river are the mountains that produce talk. I have ſeen ſpecimens formerly found, 28 inches ſquare, and tranſparent as glaſs: what is now found

found is very ſmall, but perfectly pellucid. All the windows of theſe parts are glazed with it.

Pellidui, - 1202——Alſo famous for the above mentioned animals, and the laſt place that produces corn.—*N. B.* Sparrows and magpies were not ſeen further north. They only came here about five years ago, after the ground had begun to be cultivated.

Nuye, - 1475.

Yerba, - 1505.——Here we ſaw the firſt Yakut or Sochalar. He was our pilot; very communicative, and good-natured. In this neighbourhood the river is replete with iſlands, having on them temporary Tungooſe habitations for fiſhing.

Patama, - 1575.

Oonaghtak, - 1595.

Olekma, - 1822.
Aldan, - 2600.
Viluye,

} I ſhall refer to theſe rivers, and deſcribe them on a future occaſion, in an account of the Amur.

Beſides ſeveral rivers farther north, of no material conſequence.

Our navigation only extended to the town of Yakutſk, 2390 verſts from Katſhuga. We arrived in this town the 29th May, at ſeven P. M., and immediately ordered the loaded veſſels to croſs the river to the plains; whence the goods are to be forwarded on pack-

pack-horſes. The next day the other barks arrived ſafe at the above-mentioned place.

To tranſport the articles that we had with us, and the parties, acroſs the uninhabited country to Ochotſk, and to the river Kovima, two thouſand horſes were demanded of the commandant, or military governor, whoſe buſineſs it is to enforce the ſame by a paper ſigned by himſelf to the court of the interior, or land diſtrict. The Governor General of Irkutſk, Jakobi, had cloſed a contract with the merchant Siberakoff for proviſions, conſiſting of flour, peaſe, grits, oatmeal, meat, butter, ſalt, vinegar, brandy, &c. an 18 months ſupply for 100 men; and the contractor bound himſelf to deliver the ſame at Virchnoi Kovima, by the firſt day of Auguſt next. Sail-cloth and raw-hides, for making baidars *, were alſo to be delivered by him, loads for more than 2000 horſes.

The ſame gentleman cloſed the contract for the delivery of proviſions, &c. at Ochotſk, a three years ſupply for 250 men; tallow for candles, greaſe, pitch, tar, &c. &c. Beſides the immenſe number of horſes wanted to tranſport the articles mentioned, our guns, anchors, cables, cordage, ſail-cloth, cloth, and ſlops, with ammunition of all kinds, ſtill remained to be forwarded from Irkutſk.

Theſe horſes were to be obtained from the Yakuti inhabiting the diſtrict of Yakutſk, and the Viluye. I think it neceſſary to remark, that to every three loaded horſes, a ſpare one is allowed; and a guide has charge of only ſix under loads, two ſpare ones,

* Baidars are boats very flat-bottomed, the frames made of twigs, and covered with leather: they are ſo light, that four men can carry them with eaſe, and are rowed with ſix or eight oars.

and one upon which he rides; ſo that where 2000 horſes are demanded, 3000 are employed. The leſſer number is paid for at the rate of one copeak a verſt *per* horſe: the average rate of travelling is 20 verſts each day.

I was ſurpriſed at the aſtoniſhing activity that appeared in every officer civil and military, from the firſt to the laſt, in volunteering to go to ſome tribe or other of the Yakuti to procure horſes; but the grand point could not long remain a ſecret; for their exceſs of zeal (as is the caſe in moſt zealous meaſures) led to an open breach between the military and civil government, which laſted juſt long enough for each to explain the intereſted views of the other. After they had done this in the moſt forcible manner, and completely vented their rage, they began to deliberate; when it appeared, that both parties agreed upon the whole, and that the extent of the commiſſion would admit of a general diviſion: ſo they ſoon made up their minds to ſend ſome of each party with official authority. Univerſal harmony was immediately reſtored; and each commiſſioner went with a full reſolution to ſerve his employer in the beſt manner he could, with propriety to himſelf.

This was the firſt town in which I obſerved the officers from the higheſt to the loweſt ranks form the poorer ſet of inhabitants; while the Coſſack Sotniks *, and Pyat † Deſetniks (petty officers), were the moſt affluent. They are chiefly Sinboyarſki ‡, well acquainted with the languages of the Yakuti, Tungooſe, &c. and are always employed in offices of truſt. We found the beſt entertainment among them; at the ſame time they appeared the

* Commanders of 100. † Commanders of 50.

‡ The loweſt claſs of gentility, conferred upon the Siberians for ſome particular achievement or diſcovery.

more

more welcome gueſts at the habitations of their ſuperior officers, where they pay their reſpects in the moſt flattering manner, and never experience a refuſal in a proper application for an advantageous miſſion. I had my quarters at the houſe of the commandant, with Captain Billings.

In the evening of the 7th June, the firſt party was diſpatched, under the command of Mr. Bakoff, with 136 loaded horſes. Captain Lieutenant Hall had the charge of the parties to Ochotſk, and Captain Lieutenant Bering of thoſe to the Kovima.

Yakutſk contains 362 wooden houſes, five churches, and a cathedral. A monaſtery is now building, latitude 62° 1′ 50″ north, longitude 129° 34′ eaſt, on a ſhallow branch of the river Lena, three verſts weſt from the main channel (*which is four verſts acroſs*), ſituated on a low ſandy plain, ſixty verſts long, in a direction north-weſt, and eleven broad, producing chiefly wormwood, thiſtles, a few flowers, and wild onions; here and there cluſters of hawthorn buſhes and oziers, with currants, dog-roſes, and raſpberries. It is bounded to the weſt by a ridge of inconſiderable but woody mountains, from which the inhabitants obtain firewood.

Never was there a town in a worſe ſituation than this. The branch of the river on which it is built is dry by the middle of July, and continues ſo all winter, the inhabitants having to go the diſtance of three verſts for water. Although the river abounds with fiſh, they receive their ſupplies of that article, as alſo of meat, from about the Viluye, 400 verſts down the river. Vegetables are brought them from the neighbourhood of Kiringa, 1650 verſts up the river.

In the month of June every neceſſary of life is brought hither down the Lena; and this is called the Yarmank. During this time every trader has permiſſion to hire a public ſhop, and ſell his ware; and this is the time at which the opulent lay in a twelve months' ſtock; for at the expiration of the month, the privilege of trading is only veſted in the hands of the burghers, who make their own prices: theſe conſiſt of five or ſix. Siberakoff, the contractor, has a houſe here, and at preſent occupies it himſelf, to ſuperintend in perſon the diſpatch of the articles for the expedition. During our ſtay, he may be ſaid to have kept open houſe for the entertainment of the chief inhabitants and our gentlemen.

On Tueſday the 9th June we took leave of our friends in this city, after a ſtay of 10 days, and croſſed the Lena, which is four verſts over, to the plains, called the Yarmank, from being the general rendezvous for all travellers, traders, and tranſport goods, to the eaſtern and north-eaſt parts of the empire. Here are extenſive meadows, producing graſs in abundance. The moſt prevailing plant that I obſerved was wild flax, ſome with white, and ſome with blue flowers; and a remarkable plant which the Ruſſians call Zemlennoi Laudon, or frankincenſe of the earth: this is not a gum, but an aromatic root, given to children and to adults for pains in the bowels; its ſmell is very like that of ſnakeroot, though in appearance it is not ſo fibrous. Maiden-hair grows in abundance, and is collected, dried, and uſed by the Coſſacks inſtead of hops. The Yakuti alſo make uſe of it occaſionally, with juice of berries and water, to drink. Some ſandy places are overgrown with horſe-radiſh and wild onions.

On Wedneſday the 10th June, at nine o'clock in the morning, all our baggage and food for the road were loaded on pack-horſes,

about five poods on each, and we commenced an equeſtrian route. Our party conſiſted of Captain Billings, Dr. Merck, Mr. Robeck, Mr. Main, and myſelf, two petty officers, and nine privates, with an adequate number of Yakuti to take care of the horſes and ſerve as guides. We travelled this day 28 verſts, to the ſolitary habitation of a Yakut, where we halted and pitched our tents for the night. The next day we made 49 verſts.

On Thurſday the 16th of June we arrived, about eight P. M. at the river Amga, or Anga, which falls into the Aldan, and were ferried over to the habitation of a Yakut (who has charge of the ferry, in company with a Coſſack), 237 verſts from Yakutſk. The face of the country hitherto was undulated, conſiſting of wood, meadows grown with fine graſs, and an immenſe diverſity of flowers, romantic lakes, ſome of them very extenſive and replete with iſlands; and here and there a ſolitary hut, the habitation of ſome herdſman. We ſaw and ſhot a great number of wild fowl, ducks, curlews, &c. From the Anga to the river Aldan, we found the country rather mountainous, more woody, and bearing leſs graſs. Here we arrived on Thurſday the 18th. The weather had been extremely hot and ſultry all the way from Yakutſk; but we had here a thunder ſtorm, which cooled the atmoſphere.

The habitations on the north ſide of the Aldan conſiſt of four huts, one belonging to Coſſacks who guard the ferry, the reſt to Yakuti with horſes. 331 verſts from Yakutſk the river is 500 fathom wide, flowing to the weſt, and well ſtocked with fiſh, as are alſo the neighbouring lakes. The woods abound in wild beaſts and game; and the plains are inhabited by very opulent Tartars, who poſſeſs immenſe numbers of horſes and herds of cattle. The ſouth of the river is bounded by perpendicular

moun-

mountains 70 fathom high, compoſed at the baſe of a hard ſandy ſtone replete with petrified trees, very large, all lying one way, the roots north-weſt, and the tops in the mountains ſouth-eaſt. Above there is a ſtratum of looſe ſand-ſtones and ſmall calcareous ſhells, with ſoft greeniſh earth that has a taſte like copperas and a ſtrong ſmell, and balls of ſulphur. A ſtratum follows of a much harder ſtone, very compact, and impregnated with oyſter, ſcollop, and other larger ſhells. Another ſtratum of petrified ſea weeds, and wood; and then a ſtratum of ſmall muſcle ſhells in a very hard and compact greyſtone, ſome of which, when broken, are found to be full of fine eryſtals, &c. This mountain is ſix verſts in length, and about 500 from the neareſt ſea. Here we found and left the firſt detachment, to divide into ſmaller parties.

Captain Billings reſolved on proſecuting his journey to Ochotſk with all poſſible ſpeed; to accompliſh which, he left all his baggage with the party here, and only took neceſſaries for the road; and in the evening of the 19th we left the Aldan with twenty-one horſes. Our party conſiſted of Mr. Robeck, Dr. Merck, and myſelf; a petty officer, two guides, and an interpreter. We now left the fertile and inhabited plains, and got intangled in woody mountains and moraſſes; rivers and torrents ruſhing down the mountains, and all the productions of nature changing, except the larch and firs, which were now ſtunted and ill grown. We found large ſpots covered with wild rhubarb and roſemary; Rhe Rhaponticum and Ledum Paluſtre; juniper, bruſh-wood, pinks, thyme, &c. The climate equally altered, the air becoming cold and raw.

We arrived at the ford of the Belia Reka (White River) on Sunday the 21ſt of June, at two P. M.; but found too much water to

juſtify

juſtify an attempt to croſs it. We therefore placed a mark in the river, and, obſerving that it was falling ſlowly, pitched our tents, and the next morning perceived but very little alteration in the river.

Captain Billings, impatient to proceed, tried in many places to croſs; at laſt his horſe got into deep water, and he was forced to ſwim over. The river is about 200 fathom wide, and the ſtream was about ſeven knots, at the commencement of a rapid, over large ſtones; but the deep part was not above 15 fathom over. I ſent him a Yakut guide and an interpreter, with ſome dried bread, brandy, tea and ſugar, and my ſmall tent. Dr. Merck attempted to croſs; but the rapidity of the ſtream made him ſo giddy, that he fell off his horſe where the water was only knee deep, and returned. A boatſwain's mate, Kopman, volunteered, whom I permitted to go with a ſecond guide, ſome ſpare horſes, and bed clothes; and lucky it was that I ſent a guide with him, or he and his horſe would have gone down with the current. As I was very well mounted, I alſo ſwam acroſs ſafely, and made a good fire, at which we dried and refreſhed ourſelves, and proceeded. Our party was now reduced to five horſemen in all, and nine horſes *, two grey hounds, and a pointer. Our ſtock of proviſions conſiſted of twenty pounds of dried bread, two bottles of brandy, with a little tea and ſugar, for a journey of 600 verſts through an uninhabited country. We experienced great advantage from travelling with few horſes, as we had leſs difficulty in getting forward; and a very ſmall plat of graſs at once afforded us a halting place for the night, and furniſhed food for them.

* Captain Billings left one of the guides with directions for the other parties.

On

On the 23d we croſſed a very conſiderable mountain called the Tſhakdall; the aſcent of which was chiefly up a torrent ruthing from its ſummit over large ſtones. Here we obſerved for the firſt time the plant called by the Ruſſians Piania Trava (Rhododendron Chryſanthum), held in great eſtimation by all the different tribes of Siberian Tartars, as alſo by the Ruſſians, for its efficacy in curing rheumatic complaints and old ulcerated wounds, from whatever cauſe they ſpring. It is drank in a ſtrong decoction in a vapour bath, and the wounds are waſhed with it. The mountain tops are covered with this plant and with the (Pinus Cembra) creeping cedar.

On Wedneſday the 24th of June, at ſeven A. M. we had a heavy fall of ſnow, which covered the mountain tops. Not expecting ſuch a ſudden change from the extreme ſultry weather that we had experienced a few days ago, we were quite unprovided for it, having left all our clothing, except nankeen jackets and trowſers, behind with the baggage; at the ſame time the moraſſes and rivulets prevented our going on foot.

In croſſing a very boggy ſpot our guide ſung a melancholy ſong, which was thus interpreted: "This is the ſad ſpot that was moiſtened by the tears of the venerable Tſhogonnoi. The worthy old man! moſt ſkilful in the chace, and the conſtant protector of his friend. 'Twas here that, unable to ſupport the fatigues of the journey, his companion, his friend, his laſt horſe, fell. He ſat down by the ſide of his laſt horſe, and vented his anguiſh in the bittereſt of tears: Yes, the bittereſt of tears; for he never failed in the duties of a Sochalar *. He never deſerved to weep.

* The Yakuti call themſelves Socha, and the ſingular is Sochalar.

The

(The third day he was relieved by a traveller and aſſiſted home)." The name of the place is Tſhogonnoi Utabyta (the tears of Tſhogonnoi). Having croſſed this bog, we aſcended the mountain Unechan, on the top of which, 178 verſts from Aldan, we had a ſhower of ſnow, and were quite benumbed with cold. We crept under the Pinus Cembra, made a fire, heated ſome water with brandy, and refreſhed all hands. The clouds ſoon ſunk below the mountain, and we had a clear ſky in deſcending its ſouth ſide, where the ſun dried our clothes. Here our greyhounds ran down ſeveral hares, which the pointer brought us. A torrent ruſhes down this mountain flowing about 10 verſts. The Sammach meets another from the Seven Mountains called the Kunkui, which is the ſource of the Belia Reka, winding weſtward round the mountains.

On the 25th we croſſed the Seven Mountains ſo called, though it is only one with ſeven ſugar-loaf tops; but the ſummit of each muſt be croſſed, on account of the immenſe ravines on each ſide. We arrived at three P. M. at the river Alachune, were ferried over, and pitched our tents. About three verſts off are two ſolitary huts, inhabited by a Coſſac and Yakut, to guard the ferry, and to keep ſix horſes for couriers. We are here 230 verſts from the Aldan. Mountains, bogs, rivers, and fields of continual ice, ſucceed each other to Yudomſky Kreſt, 200 verſts. Here are three very good huts inhabited by Coſſacs on the river Yudoma; alſo Government ſtorehouſes, where ſupplies are kept for Ochotſk till winter, when they are forwarded on ſledges with dogs. We obtained here a little bread and ſome meat; but, our horſes being in very bad condition, we left our boatſwain's mate to wait the arrival of the firſt party. We alſo left our dogs, which were ſo tired that they could not poſſibly proceed any further with us.

Mountains and rivers continue to Urak Plotbiſha, 90 verſts. This was the place where formerly boats were built to convey the heavier articles of Captain Bering's expedition down the Urak to the ſea of Ochotſk and the port. Five miſerable huts inhabited by Coſſacs, and Government ſtorehouſes, occupy a ſmall place at the foot of barren mountains, from 20 to 60 fathom high, replete with Calcedoni, or what Mr. Laxman calls the Urak onyx, in a mother of greeniſh and reddiſh grey ſtone. The neighbourhood is extremely mountainous, containing a great variety of agates; and many large ſtones in the river poſſeſs petrifactions and impreſſions of large ſhells. Some mountains appear compoſed of jaſper or jade.

CHAP. IV.

Arrival at Ochotſk.—Preſent State of that City.

We arrived at Ochotſk on Friday the 3d of July, (computing the diſtance about 1020 verſts from Yakutſk,) and immediately ſaw Mr. Saretſheff, who informed us that he could not find timber fit for ſhip-building nearer than 70 verſts up the Ochot; and that he had only two days before ſent the ſhip-builders with 47 hired and government men to ſelect and fell proper trees as near the river-ſide as poſſible.

On the 8th July, the tranſport veſſel arrived from Izſhiga, ballaſted with black petrified wood exactly reſembling pit-coal; but fire had no effect upon it.

On Sunday the 12th our baggage arrived, with Meſſrs. Robeck and Merck, all ſafe. They croſſed the White River the evening of the day after our departure without much difficulty, the waters having much abated.

Toward the evening of the 14th, appearances indicated a fine ſucceeding day, according to the prediction of the Lamuti, who waited on the commandant, requeſting his permiſſion to allow them, the Yakuti, and as many of the inhabitants as were willing, to go the next morning on a duck-chaſe out to ſea, and return with the flowing tide. The permiſſion was made public.

Wednesday the 15th, between three and four o'clock in the morning, the weather being calm and cloudy, about 50 small canoes, with Lamuti, Yakuti, and a few Russians, went out to sea, and returned with the tide at noon, driving before them an immense number of the sea-duck, called Turpan. When they were got into the bay of Kuchtui, about a mile from its discharge into the sea, they were surrounded by more than 200 canoes, drawn up in a regular line, forming a crescent. Thus inclosed, the tide left them in about six inches water, and all the canoes were aground. A signal officer (the policy master) appointed by the commandant gave the word for a general attack, when a scene of the most whimsical confusion ensued. Men, women, and children, plunged in an instant into the water; some armed with short bludgeons, and others with strings and nets. While one knocked on the head all that came in his or her way, others of the same party strung or netted them, all hurly burly, huddling over each other. No field of battle is subject to such a variety of incidents and transitions. An ill-directed blow sometimes lights on the hand of a friend, instead of the head of the foe. Suddenly the shrieks, scolding, and swearing of the women, and wrangling among all, change to peals of laughter and merriment; and the supplication of the ducks, and the noise of myriads of gulls hovering about, form the strangest medley of sounds, perhaps, that were ever heard. The women caught by far the greater quantity; and the whole number destroyed amounted to more than six thousand five hundred.

The Turpan is as large as a domestic duck. The neck short; the bill black, short, and narrow, with a callous knob on the nostrils. The feathers black, with dark grey spots. They moult all the quill feathers at once, and consequently cannot fly; being driven,

driven, therefore, into ſhallow water, they are prevented from effecting their eſcape by diving, and become an eaſy prey. They taſte very fiſhy, but make an agreeable change of food for the poor inhabitants. When ſalted and ſmoke dried, they are eſteemed an excellent whet, with a dram, before dinner.

In the evening, a merchant's veſſel, belonging to Grigory Shelikoff, under the command of Yefſtrat Delareff, a Greek, arrived from the Aleutan iſlands, and the north-weſt coaſt of America, laden with furs. He left Ochotſk in the month of July 1781; arrived on the 10th Auguſt at Bering's iſland, where he paſſed the winter; the ſecond winter he ſpent at Oonalaſhka; the winter of 1783 at Prince William's Sound, and the years 1784 and 1785 at Unga, an iſland off Alakſa.

Captain Billings's inſtructions recommended his travelling from Ochotſk in the tranſport veſſel to Izſhiga; to croſs the country of the Tſhutſki, and deſcend the river Omolon to the Kovima; but it appeared not practicable for more than two or three in company to go this road, which was rendered ſtill more uncertain, owing to the natives being on a doubtful footing of friendſhip with the Ruſſians. This intelligence was confirmed by reports to Government brought by the tranſport veſſel that arrived on the 8th inſtant.

Major Shmaleff, now in this town, was the commanding officer at Izſhiga, or Izhiginſk, where he was eſteemed to a degree of adoration by the ſavage neighbours, when a Lieutenant Poloſoff was ſent thither to ſuperintend the diſcipline of the few ſoldiers in the garriſon. This man preferred ſeveral ſecret charges againſt the major, who was in conſequence ordered to the government

vernment city of Irkutſk to anſwer them; but illneſs has prevented his going farther.

The Tſhutſki and Koriaki, arriving at Izſhiga after his departure, made inquiries after their old friend. Receiving no ſatisfactory accounts, however, and not meeting with the treatment that they were accuſtomed to, they refuſed the payment of their tribute to the new officer, who inſulted and threatened them. They therefore left the place in the night in great diſguſt, vowing revenge againſt the deſtroyer of their protector, as they called Shmaleff.

The very heavy complaints on all ſides againſt Poloſoff induced the chancery of the Port of Ochotſk, under whoſe juriſdiction Izſhiga ſtands, to order him away with the tranſport veſſel ſent there laſt ſpring, and to leave the command of the place to a ſerjeant; whoſe reports ſoon arrived, repreſenting the neceſſity of Major Shmaleff's return to ſet matters to rights, and appeaſe the wrath of the ſavages, who would not permit a Ruſſian to go among them.

Poloſoff went immediately to Irkutſk, and, having ſpent all his money, inſinuated himſelf into the acquaintance of Captain Billings, who, on a ſuggeſtion of the governor's, that he might be of ſervice, engaged him in the expedition, and brought him back to this place.

An old man now reſiding in this town, a native of the Kovima, Lobaſheff, who has accompanied ſeveral expeditions to the Icy Sea, repreſented an eaſy way to the Kovima by the Amicon, and offered to guide Captain Billings; aſſuring him, that the roving

Tungooſe

Tungooſe on the road would put him to rights ſhould he err. The Lamuti or Tungooſe here confirming this intelligence, the reſolution was taken; and on the 22d July Captain Billings demanded 93 horſes for his conveyance, with baggage, &c. On the 25th, a courier was diſpatched to the Amicon to procure a change of horſes.

On the 27th, the laſt of our parties arrived from Yakutſk, with the baggage in pretty good condition.

On Thurſday the 30th of July, the commandant of this port (Lieutenant-Colonel Kozloff Ugreinin) preſented an official paper to Captain Billings, repreſenting the variance between the Ruſſians and the natives near the fort of Izſhiginſk, and recommending Major Shmaleff (now here on account of the falſe repreſentations made by Lieutenant Poloſoff), to be ſent to Izſhiga, on the part of the expedition, to regain the friendſhip of the Tſhutſki and Koriaki.

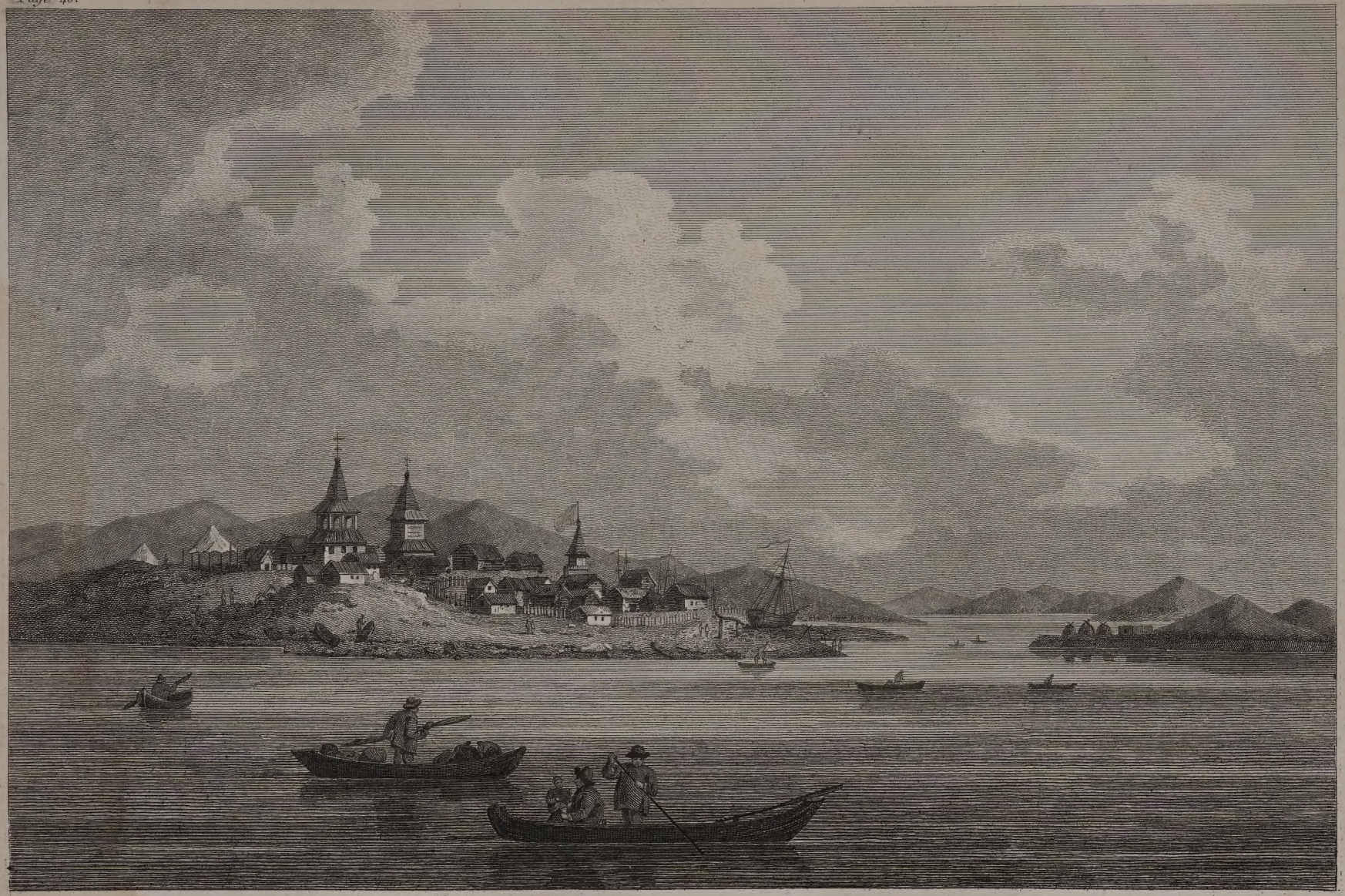
Major Shmaleff, on application, immediately offered to go, with great affability, and in full confidence of ſucceſs. He is near 60 years of age; rather above ſix foot high, and very ſtout; but has been ſome time ill, and is ſtill rather infirm. His diſpoſition is mildneſs and good nature itſelf; and no man in the world ever bore a better character. He offered to ſail with the tranſport veſſel now ready for Izſhiga; and was directed to ſecure two interpreters and two Coſſacks of the Izſhiga command, and, after pacifying the natives, to proceed to Virchni Kovima, and join us as ſoon as poſſible; which, he ſaid, he ſuppoſed would be about next March. He was ſupplied with money for his expences, and trinkets for preſents.

Captain-

Captain Lieutenant Hall now received directions to ſuperintend the building of ſhips here, inſtead of Captain-Lieutenant Saretſheff, who was ordered to accompany us. He departed with Mr. Bakoff and the party for the Kovima on the 1ſt Auguſt; Captain Billings, with Dr. Merck, Mr. Robeck, myſelf, and a few attendants, meaning to follow in two or three days: but before I leave this place, I beg leave to lay before the reader the following account of its ſituation.

The city of Ochotſk is in latitude 59° 19′ 45″, longitude 145° 16′; built on a neck of land five verſts long, and from 15 to 150 fathom wide, and its direction due eaſt. It is chiefly compoſed of ſand, ſhingles, and drift wood, the whole thrown up by the ſurf. The ſea bounds it to the ſouth, the river Ochot to the north, and its eſtuary terminates the neck of land. The town occupies the ſpace of about one verſt in length, contains 132 miſerable wooden houſes; a church and belfry; ſeveral rotten ſtorehouſes; and a double row of ſhops, badly ſtocked with handkerchiefs, ſilks, cloth, leather, and very bad trinkets; hams, butter, flour, rice, &c.

The air is unwholeſome in the extreme, as fogs, miſts, and chilling winds, conſtantly prevail, which ſo much affect the products of the earth, that nothing grows within five verſts of the ſea. Here ſtunted and withered larch-trees commence ſcantily; they thicken at 10 verſts; at 15 verſts a ridge of inconſiderable mountains are croſſed, which ſeem to ſtop the effects of the ſea air; for trees become more ſizeable, meadows not unfrequent; and a few indigent Yakuti live hereabouts, with a very ſmall number of horſes and cows, chiefly belonging to the inhabitants of Ochotſk; who, except two prieſts, and the officers of the



View of the Port of Ochotsk.

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courts of juſtice, conſiſt of ſailors, Coſſacks, and their families, the moſt drunken ſet I ever ſaw; but, even in their exceſſes, obedient, and never inſulting to their ſuperiors. The ſcurvy rages here with great violence, owing, perhaps, as much to want of attention and cleanlineſs in the inhabitants, as to the climate.

Fiſh is the chief food; but the finny tribe appear late, the firſt glut of ſalmon aſcending the rivers at the latter end of June. Both men and women are employed in the fiſhery, which they practiſe with a net about 20 feet long, and three or four broad; one part ſunk with ſtones, while the other is kept afloat by pieces of the bark of poplar. The net is puſhed into the river, by means of a long pole, while the fiſher ſtands on the beach. One perſon ſometimes has three nets, and catches during a tide from eight to twelve hundred. When fiſhing is over, they ſit down on the beach, ſplit the fiſh, and hang them up to dry for a winter's ſtock for themſelves and their dogs, which are uſed for draft, and each houſeholder on an average keeps twenty.

Every ſpring is a time of ſcarcity of proviſions; the dogs then become ſo ravenous, that it is not uncommon for them to deſtroy one another; and the firſt horſes that arrive are generally torn to pieces.

On our arrival, we dined with Mr. Saretcheff on cold roaſt beef, which taſted ſo fiſhy, that we thought it had been baſted with train oil. In the afternoon we drank tea at the Commandant's: this alſo taſted of fiſh; and when I mentioned it to our hoſt, he recommended the next cup without cream, which was very good. He told me, that the cattle had been fed for the laſt ten weeks entirely upon the offals of fiſh, and that the cows preferred dried ſalmon to hay.

The harbour is formed by the river Ochot, flowing from the weſt and north-weſt into the ſpacious Bay of Kuchtui, 14 verſts long, and about four wide; ſhallow, and more than three-fourths dry at low water. A river that gives name to the bay falls into its north-eaſtern extremity under the Mariakan mountains. Theſe two rapid torrents, at their junction, are continually ſporting with the banks, removing ſome, enlarging others, and throwing up new ones: the beds of the rivers are compoſed of looſe pebbles, from about the ſize of a pigeon's egg to that of a ſwan's. The main channel of the Ochot is only navigable for ſmall empty veſſels one mile upwards; for in many places the depth is only one-half to two and a half feet, or ſix to eight feet at high water.

The communication with the ſea has the appearance of an artificial cut 250 fathom wide, about 150 long, in a direction due ſouth, and from ſix to ſeven fathom deep: the current three to five knots ripling. The ſudden check that the ſtream receives from the ſea is the cauſe of a bank in the form of a creſcent, ſouth ſouth-weſt, and weſt, the diſtance of a mile and half out: a bar continues to extend weſtward, leaving a channel five feet deep at low water only, 30 fathom wide, but frequently ſhifting; and this is the only navigable paſſage. A very violent ſurf conſtantly breaks over the bar, and all along the ſhore. At the time of the equinoctial gales, the ſpray wets the houſes of the town, and ſeems to threaten the deſtruction of the whole place. Shoal water continues out to ſea; and at the diſtance of eight miles, the depth is only 10 fathom, with a bottom of looſe ſtones, not compact enough to hold an anchor againſt even a moderate breeze of wind.

Such is the picture of a place where we purpoſe building two ſhips of 260 to 800 tons burthen!

CHAP.

CHAP. V.

Departure from Ochotſk.—The Tungooſe deſcribed.—Amicon.—Tarin Urach.—Zaſhiverſk.—Virchni Kovima.

In the evening of the 3d of Auguſt we left Ochotſk, and travelled about eight verſts, when we halted. Kopman, the boatſwain's mate, who ſwam over the Belaia Reka to Captain Billings, in croſſing a ſmall branch of the Ochot, which led to our halting place, fell from his horſe, and was drowned; nor could we then by any means find his body. It was, however, diſcovered a few days afterwards by a Yakut; the head much bruiſed, and a fowling piece, which was ſlung over his ſhoulder, bent: probably in his fall he had got entangled with the horſe's legs. The next day we came to the ſpot where our people were cutting timber, near Mundukan, a branch of the Ochot, in a grove of ſizeable larch.

On the 7th, at noon, we forded the Ochot, and arrived at the diſcharge of the river Ark, among the ſummer habitations of the Tungooſe, who treated us with berries, and the women entertained us with a dance.

On the 9th we croſſed the Aglikit, on the borders of which, at the foot of a mountain called the Ooyega, are ten ſummer huts inhabited by Tungooſe. Captain Billings, deſirous of getting forward with all poſſible ſpeed, obtained from them 22 rein-deer, and halted the next day to refreſh our horſes; the neighbourhood

producing plenty of good graſs: we are here 200 verſts north north-weſt of Ochotſk.

On the 11th I received diſpatches for Captain Lieutenant Bering, at Virchni Kovima, deſiring him to proceed from thence to Seredni, and collect timber to build three ſloops for navigating the Icy Sea; if, upon enquiry, there appeared a probability of procuring wood; if not, to ſtay at Virchni.

Having with me the ſhip-builder and my ſervant, at three P. M. I left the party, mounted on a beautiful young rein-deer; the ſaddle placed on its ſhoulders, without ſtirrups; no bridle, but a leather thong about five fathom long tied round the head of the deer; this is kept in the rider's left hand, that he may prevent its eſcape if he falls, and, when refreſhing, have a little ſcope to ſelect its food. A ſtrong ſtick about five feet long aſſiſts the rider to mount; though the Tungooſe, for this purpoſe, uſe their bow; ſtanding on the right ſide of the deer, they put the left leg upon the ſaddle, lean on the ſtick with the right hand, and ſpring up with aſtoniſhing apparent eaſe: we, however, could not effect it by any means without aſſiſtance; and, during about three hours travelling, I dare ſay that we fell near twenty times. The top of the ſaddle is ſquare and flat, projecting a few inches over the ſides of the deer; the ſeat is ſecured by drawing up the calves of the legs toward the thighs, and clinging faſt to the projecting parts of the ſaddle, which at firſt cauſes aſtoniſhing pain to the thighs: by the third day, however, I became a very expert rider; the ſhipbuilder could not manage it at all, and went for the moſt part on foot; of courſe my travelling was not very expeditious.

On

Drawn by W. Alexander

Engraved by J. Powell

View of the Peak and Rivulet of Shilcap near Ochotsk with Tungoose Tents.

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On the 16th of Auguſt we croſſed a very lofty mountain, called the Oorakantſha, about half way up the aſcent of which is a plain, with an extenſive lake. The paſſage over this mountain is very diſagreeable, up a ravine, down which a noiſy torrent takes its way among maſſes of ſtones, with tremendous overhanging rocks. We laboured twelve hours in croſſing it, and found it extremely barren, not producing a blade of graſs; but in one place was a ſmall bed or two of moſs, where we refreſhed our deer for about a quarter of an hour. This is one of the Vircho Yanſki chain of mountains, remarkable for being the ſource of the Ochot, Indigirka, Iydoma, and Mayo rivers, and diſtant from Ochotſk 415 verſts. I compute its ſituation from the reckoning that I kept of courſe and time, latitude 62° 10′, longitude 144° eaſt of Greenwich.

This chain has a direction nearly eaſt and weſt, extending about two degrees north and ſouth; though ſome branches appear from the latitude of 61° to nearly 67° north.

On the 17th I overtook the courier that was diſpatched the 25th of July from Ochotſk, and ſoon diſcovered that he had been making a trading trip among the Tungooſe. I therefore ſent him to ſeek for horſes among the neighbouring Yakuti, agreeable to his orders.

On the 20th I arrived at the Amicon, which is the name of the chief ſource of the Ingigirka, on the borders of which are built two Ruſſian Irbas, inhabited by Coſſacs, who are charged with the care of poſt-horſes, or rein-deer, for travellers, this being the winter road from Yakutſk to Ochotſk; latitude 63° 5′, longitude 145°.

This neighbourhood contains, within the circumference of 30 verſts, about 20 inhabited Yakut huts. The face of the country is moderately level for about 90 verſts, interſperſed with meadows and groves of larch, poplar, aſp, birch, and alder, with underwoods of black and red currants, dog-roſe, and raſpberry. The ſituation is well calculated for the Yakuti; for, placed beyond the reach of intruding viſitors, they paſs their time in ſavage indolence, and, like the bears, their neighbours, are only rouſed from their lethargy by the abſolute calls of nature, when they prowl about in queſt of animals. The verges of the mountains that bound the plains are infeſted with bears, lynxes, wolves, foxes, elks, deer, hares, ſquirrels, and ſome ſables. The meadows ſupport their immenſe numbers of cattle and horſes, and the rivers and lakes abound in fiſh and wild fowl; ſo that a trifling effort is ſufficient to ſupply every want that they are ſenſible of.

I took leave of my Tungooſe and their rein-deer, and declare that I did ſo with regret; for I was now an adept in riding, and found them more eaſy and agreeable than horſes; but, above all, I was enchanted with the manly activity of my guides, their independence, and contentment. Satisfied with the limited productions of nature, where nature itſelf ſeems to forbid the approach of mankind, their aſtoniſhing fortitude, keeping in full force every lively ſenſation of the mind, and ſurmounting all difficulties, until they obtain the intereſting object of their purſuit, inſpired me with an ardent deſire to participate in their dangers and delights. I pronounce them "great Nature's happy commoners;" for they are

———"As free as Nature firſt form'd man,
"Ere the baſe laws of ſervitude began,
"When wild in woods the noble ſavage ran."

The

The romantic deſolation of the ſcenes that frequently ſurrounded me, elevated my ſoul to a perfect conviction that man is the lord of the creation. I conſidered the dependence of the inhabitants of great cities, neceſſitated to ſupply the luxurious, opulent, but ſtill more dependent, as the greateſt and moſt ſubmiſſive humility that refinement can impoſe upon man, checking his hoſpitality, and baffling all his hopes of mutual and reciprocal enjoyment, which is the baſis of ſociety, and the only ſource of happineſs.

The Tungooſe wander over an amazing extent of ground, from the mouth of the Amour to the Baikal Lake, the rivers Angara, or Tungooſka, Lena, Aldan, Yudoma, Mayo, Ud, the ſea coaſt of Ochotſk, the Amicon, Kovima, Indigirka, Alaſey, the coaſt of the Icy Sea, and all the mountains of theſe parts; conſtantly on the look-out for animals of the chaſe. They ſeldom reſide more than ſix days in one place, but remove their tents, though it be to the ſmall diſtance of 20 fathom, and this only in the fiſhing ſeaſon, and during the time of collecting berries in ſuch ſolitary places as are far diſtant from the habitation of Coſſacs *. Here they leave their ſupplies of dried fiſh and berries, in large boxes built on trees or poles, for the benefit of themſelves and their tribes in travelling during the winter. Berries they dry by mixing them with the undigeſted food (*lichen*) out of the ſtomach of the rein-deer, making their cakes, which they ſpread on the bark of trees, and dry upon their huts in the ſun or wind.

They ſeem callous to the effects of heat or cold; their tents are covered with ſhamoy, or the inner bark of the birch, which they render as pliable as leather, by rolling it up, and

* They ſay, that their tents contract a diſagreeable ſmell from remaining long in one place.

keeping

keeping it for ſome time in the ſteam of boiling water and ſmoke.

Their winter dreſs is the ſkin of the deer, or wild ſheep, dreſſed with the hair on; a breaſt-piece of the ſame, which ties round the neck, and reaches down to the waiſt, widening towards the bottom, and neatly ornamented with embroidery and beads; pantaloons of the ſame materials, which alſo furniſh them with ſhort ſtockings, and boots of the legs of rein-deer with the hair outward; a fur cap and gloves. Their ſummer dreſs only differs in being ſimple leather without the hair.

They obtain ſupplies of food from the Ruſſian inhabitants of the Amicon, Indigirka, Uyandina, Alaſey, Kovima, Zaſhiverſk, Ochotſk, &c. They are religious obſervers of their word, punctual and exact in traffic; ſome few are chriſtened; but the greater part are Demonolatrians, have their ſorcerers, and ſacrifice chiefly to evil ſpirits.

An unchriſtened Tungooſe went into one of the churches at Yakutſk, placed himſelf before the painting of Saint Nicholas, bowed very reſpectfully, and laid down a number of rich ſkins, conſiſting of black and red foxes, ſables, ſquirrels, &c. which he took out of a bag. On being aſked why he did ſo, he replied, "My brother, who is chriſtened, was ſo ill that we expected "his death. He called upon Saint Nicholas, but would have no "ſorcerer. I promiſed, that if Nicholas would let him live, I "would give him what I caught in my firſt chaſe. My brother "recovered, I obtained theſe ſkins, and there they are." He then bowed again, and retired.

They

They commonly hunt with the bow and arrow, but ſome have rifle-barreled guns. They do not like to bury their dead, but place the body, dreſſed in its beſt apparel, in a ſtrong box, and ſuſpend it between two trees. The implements of the chaſe belonging to the deceaſed are buried under the box. Except a ſorcerer is very near, no ceremony is obſerved; but in his preſence they kill a deer, offer a part to the demons, and eat the reſt.

They allow polygamy; but the firſt wife is the chief, and is attended by the reſt. The ceremony of marriage is a ſimple purchaſe of a girl from her father; from 20 to 100 deer are given, or the bridegroom works a ſtated time for the benefit of the bride's father. The unmarried are not remarkable for chaſtity. A man will give his daughter for a time to any friend or traveller that he takes a liking to; if he has no daughter, he will give his ſervant, but not his wives.

They are rather below the middle ſize, and extremely active; have lively ſmiling countenances, with ſmall eyes; and both ſexes are great lovers of brandy.

I aſked my Tungooſe, why they had not ſettled places of reſidence? They anſwered, that they knew no greater curſe than to live in one place, like a Ruſſian, or Yakut, where filth accumulates, and fills the habitation with ſtench and diſeaſe.

They wander about the mountains, and ſeldom viſit ſuch plains as are inhabited by the Yakuti; but frequently reſort to the ſolitary habitations of the Coſſacs appointed to the different ſtages, as they are there generally ſupplied with brandy, needles, thread, and

ſuch trifles as are requiſite among them and their women, who always accompany them in their wanderings.

Auguſt 20. Immediately upon my arrival at Amicon, I ſent for five horſes for my party and baggage, including one for the guide, and alſo begged that a change might be procured for the party with Captain Billings. I was informed, that a Sinboyarſk of Yakutſk, who accompanied ſome of Siberakoff's contracted proviſions, had obtained two days ago 63 horſes; and that upwards of 200 had been lately ſent from this neighbourhood to aſſiſt the party from Yakutſk under the command of Captain-Lieutenant Bering; ſo that but very few remained; and I concluded that the party which I left would be but badly ſupplied.

On Friday the 21ſt Auguſt, at noon, I obtained five horſes, and proceeded on my journey. On the 23d, in the morning, I arrived at a place called Tarin Urach, an extenſive plain, replete with lakes and woods, the habitation of ſeveral Yakuti. Here I found the Sinboyarſk from Yakutſk, with Siberakoff's proviſions. His name was Ivan Yeſimoff; and he, with the inhabitants, perſuaded me to float down the Indigerka on a raft, to the habitation of the Yakut prince, Nicolai Samſonoff, where I could be ſupplied with horſes, and proceed on a good and ſtrait road to Virchni Kovima. They aſſured me, that it was the ſhorteſt road, not obſtructed either by rivers or mountains; and that ſuch travellers as required but few horſes always took this route, which did not produce graſs enough for caravans, or great parties.

I was offered four men to take me to the Yakut prince's; and told, that, if I choſe it, they would get me two ſmall rafts im-

mediately. I agreed to this, and the next morning, at nine o'clock, embarked, made 70 verſts by dark, and pitched my tent in a wood near ſome tremendous rocky mountains. The night was windy and rainy; and the howling of wolves at no great diſtance prevented our getting much ſleep. In the afternoon of the 26th, we arrived in the neighbourhood of the prince's habitation, to which we walked, and found him extremely drunk; ſo that it was with difficulty I obtained two horſes to ſend for my baggage.

The next morning, at a very early hour, I awakened the prince, who apologiſed for having been drunk, declared that he had no horſes at home, nor any man except an old fellow; and that 60 horſes and all his men had been ſent about ten days ago to Captain Bering's party at the Momo. He told me, that the ſeaſon was too far advanced for me to travel the road pointed out; but that there was a probability of ſucceſs on the way that Mr. Bering had taken from the river Momo.

Friday the 28th, at nine o'clock in the morning, I obtained horſes, and immediately proceeded on my journey to the Momo, which we croſſed on Sunday the 30th; the country being generally level, with abundance of bruſh-wood. This morning we ſaw upwards of 20 hares, and arrived towards evening at the habitation of an unchriſtened Yakut chief, named Choratin, a very hoſpitable man, who ſaid that Captain Bering had paſſed the Momo on the 16th, and loſt ſeveral horſes in croſſing the river; but that now this road was not paſſable, and no other way was left for me to go than through the town of Zaſhiverſk, whither he would conduct me himſelf.

I was extremely ſorry to get ſo much to the north-weſt of the place of my deſtination; but, as there was no mode of avoiding it, I was compelled to ſubmit.

We proſecuted our journey the next morning, and arrived at Zaſhiverſk on the 3d of September at noon. I made immediate application to the mayor (Mr. Samſonoff) for his aſſiſtance, not only regarding my travelling the beſt way, but with reſpect to proviſions, mine of every kind being completely exhauſted in the morning, and I hoped here to procure a ſmall ſupply. Mrs. Samſonoff gave me ſome tea, ſugar, and bread, out of a very ſmall ſtock of their own. They were very happy to ſee a European, the firſt (except a general in exile) that they had beheld for four years; and their behaviour was extremely polite and kind.

This town contains one church, five iſba's, or Ruſſian houſes, and 21 huts, on a boggy point of land running into the Indigirka. The oppoſite ſhores are barren perpendicular mountains, producing in ravines here and there a ſtunted larch-tree, as deſcribed in the annexed ENGRAVING. Its ſituation I compute in latitude 66° 30′ north, longitude 142° 10′ eaſt. The inhabitants conſiſt of the mayor and his wife; the captain of the diſtrict and his wife, now reſiding (for the ſake of fiſhing) 40 verſts down the Indigirka; two prieſts, brothers, and their attendants; two writers; and all the reſt are Coſſacs.

The mountains embay the town eaſt, ſouth, and weſt; ſo that the ſun is only viſible three hours and 30 minutes at this ſeaſon; from the 12th November till the 6th January O. S. it is hid, and the place is enveloped in night.

On

View of the Town of Zashiversk.

Published March 2d 1802, by Cadell & Davies, Strand.

On the 4th, at five P. M., we left Zaſhiverſk upon the ſame horſes that brought us, but with two guides. The next day we croſſed the Indigirka at the ferry called Samondran, 40 verſts from the town. A little to the north of this place we obſerved the branch of the Virchoyanſki chain terminate by low and detached mountains; the Arctic flats ſucceeded, which are very boggy, except here and there an elevated ſpot producing a cluſter of ſtunted larch-trees, oziers, and alders; the other parts are occupied by an immenſe chain of lakes, all joining by narrow runs.

On the 13th we arrived at three inhabited Ruſſian iſba's on the river Uyandina, near its diſcharge into the Indigirka, about the latitude 67° 45′, and longitude 148° 35′. Theſe people carry on a trifling trade with the wandering Tungooſe, and the Yakuti, that go in queſt of mammont's tuſks, giving in return dried fiſh, and flour, with ſome articles of dreſs and ornament.

Near this place we recroſſed the Indigirka, and travelled nearly eaſt to the Alaſey mountain, which I eſtimate in latitude 67° 8′, longitude 153° 10′; from hence our road led nearly ſouth; the country became more uneven, and better wooded, to Virchni Kovima, where I arrived on the 28th September, after ſuffering innumerable hardſhips in this roundabout road, and being the laſt 16 days without either bread or ſalt, living merely on dried fiſh of bad quality.

Captain Billings had arrived on the 8th, and all his party a few days after him. Captain Bering was here only four days before him; but part of his convoy were not yet arrived, though they left Yakutſk on the 16th of June. The glaſs was now 18° below the freezing point of Reaumur, and all the rivers were frozen over ſufficiently to ſupport horſes.

CHAP.

CHAP. V.

Meeting of the Command, under circumſtances of difficulty.—Reflections.—Viſit the Yukagiri.—Occupations on our return.—Virchni Kovimſkoi and its Inhabitants deſcribed.—Coſſacs.

However happy I conſidered myſelf on rejoining my companions, the proſpect that it opened to my view was truly melancholy. No proviſions had arrived, although the contractor's time for the delivery was ſtipulated at fartheſt for the 1ſt of Auguſt. The ſtock that we had was inſufficient for the road; and the inhabitants, conſiſting of eight males, were in a miſerable ſituation themſelves; for, not expecting ſuch a number of viſitors, they had not made any preparation for them, and had only ſecured a ſcanty winter's ſupply of fiſh for their own uſe. To add to the general calamity, the rivers and lakes were now deſtitute of fiſh. The habitations were five half decayed iſba's, and one extenſive hut, beſides a chaſovnoi (houſe of prayer), which neceſſity compelled us to convert into barracks. Two earthen huts were immediately conſtructed, one for our Izſhiga Coſſacs, who wiſhed to live together; the other I took, with Meſſrs. Main and Varonin. Two ſheds alſo were erected; one for our inſtruments, &c. the other to ſerve as a work-ſhop for our ſhipbuilders; theſe were covered with ſail-cloth. We alſo built a ſmithy.

Captain Billings ſent all the horſes that he could collect to fetch in ſuch proviſion as might be found ſcattered about the roads and woods, by the falling of Siberakoff's horſes, and at no great diſtance.

On

On the 22d of October, the laſt of the party, under Captain Bering's charge, with baggage, &c. arrived, which increaſed our number of working hands to 78, excluſive of Yakuti. Every article was more or leſs damaged, and many things were loſt and left behind at different places, where the pack-horſes had died of fatigue and want of food. Soon, however, we were relieved by frequent arrivals of flour and butter.

On the 26th the ſmithy was finiſhed, and a travelling forge erected, which we had brought with us. Timbers were preparing for building a veſſel of 50 feet keel, and every thing going on with the greateſt alacrity, although numberleſs difficulties were to be ſurmounted, and all hands reduced to a ſorry pittance of bread and ſalt. Notwithſtanding all this, a ſpirited and determined reſolution exiſted every where. The Yakuti within 150 verſts ſupplied horſes to drag the felled timber three verſts up the river Yaſaſhnoi to the ſheds. Wiers were made and placed in the river to enſnare the finny fry; but none made their appearance until the 29th, when 45 large nalime were caught, and the next day 60, which afforded great refreſhment.

With the month of November the weather came in almoſt inſufferably cold; the thermometer indicated from 32° to 37° and 41° below 0 of Reaumur; mercury proved of no uſe in meaſuring the degrees of cold beyond 32½°; but our ſpirit thermometer never froze. I ſhall take the liberty to inſert here our thermometrical remarks for eight days, with one of Mr. Morgan's, filled with ſpirits.

Nov. 22.

			Wind.	
Nov. 22.	4 A. M.	38½	S. W.	Light airs.
	6	39¼		9 ounces ☿ frozen in 2 hours, the
	8	39¼		earth, ice of the river, timber of
	12 M.	38½		the houſes, &c. cracking, with re-
	4 P. M.	39	S. S. E.	ports equal to that of a muſket.
	6	39½		
	8	39½		10 ounces of Mercury in a ſtopped
Strong N. lights	12	40		phial froze in 2½ hours.
23.	4 A. M.	37½		
	6	36		
	8	32		About 10 o'clock the ☿ in a ſtopped
	12 M.	32	S. E.	phial thawed.
	4 P. M.	32¾		Little wind.
	6	32¾		Mercury frozen.
	8	30½		*N. B.* About half an hour only; during
Strong N. lights	12	33		which time Mercury was not com-
24.	4 A. M.	34	N.	pletely thawed, and was ſoon quite
Light	6	35		frozen again.
Airs	8 A. M.	36		
	12 M.	35½		
	6 P. M.	35		
Strong N. lights	12	36		
25.	4 A. M.	34½	S. W.	Little wind.
	12 M.	34¾	N. W.	Ditto.
	4 P. M.	35		
	6	36		
	8	37		
	12	38		
26.	4 A. M.	39½	S. E.	Thick fog; the earth and river crack-
	8	40½		ing violently.
	12 M.	40½		
	8 P. M.	40½		
	12	41¼		
27.	4 A. M.	40½	N. E.	Very light airs.
	6	40¼		Quite calm.
	8	40		At 9 A. M. a bottle ſealed with
	12 M.	38		Aſtracan brandy (called here French
	4 P. M.	39		brandy) expoſed to the froſt, thick-
	8	40		ened very much, but was not frozen.
	12	40½		

28.

			Wind.	
Nov. 28.	4	A. M.	37¾	E. N. E.
	8		33	S. E.
	12	M.	32¼	Mercury thawed.
	4	P. M.	31	
	6		30½	
	8		31½	
	9		32½	At 10° 30′ obſerved ☿ frozen.
	12	M.	36¼	At 33°.
29.	6	A. M.	38¼ to 39° all day.	
30.	6	A. M.	35¾	S. S. W. Little wind.
	8		33	
	12	M.	31½	Mercury thawed.
	4	P. M.	31½	
	8		32	
	12	N.	32	

At 37° it was almoſt impoſſible to fell timber, which was as hard as the hatchet, except it was perfectly dry; and in the greateſt ſeverity the hatchets, on ſtriking the wood, broke like glaſs. Indeed it was impoſſible to work in the open air, which compelled us to make many holidays much againſt our inclination.

The effects of the cold are wonderful. Upon coming out of a warm room, it is abſolutely neceſſary to breath through a handkerchief; and you find yourſelf immediately ſurrounded by an atmoſphere, ariſing from breath, and the heat of the body, which incloſes you in a miſt, and conſiſts of ſmall nodules of hoar ice. Breathing cauſes a noiſe like the tearing of coarſe paper, or the breaking of thin twigs, and the expired breath is immediately condenſed in the fine ſubſtance mentioned above. The northern lights are conſtant and very brilliant; they ſeem cloſe to you, and you may ſometimes hear them ſhoot along; they aſſume an amazing diverſity of ſhapes; and the Tungooſe ſay, that they are ſpirits at variance fighting in the air.

Our fiſhing continued, but gradually decreaſed after the firſt four days; and with the month of November the fiſh nearly left us, reducing us again to bread and water. At times, indeed, a few were caught till the middle of December.

We had now and then ſupplies of flour arriving, and by the end of the year the quantity received amounted to 2042 poods; but, not having ovens enough to bake bread for all hands, the generality of them uſed to boil the flour, and eat it with fiſh-oil.

Toward the end of the year the ſcurvy made its appearance, though not in a dangerous degree, and affecting but a very ſmall number. The cold increaſed to 43°, which froze our Aſtracan brandy. By Chriſtmas, we had the keel laid of a veſſel of 50 feet, and reſolved upon building another of 36 feet, with boats. The leather bags which contained our flour were appropriated to the purpoſe of making a baidar; there now exiſting no probability of Siberakoff's delivering hides for that purpoſe.

Our working hands were increaſed by 16 Coſſacs from Neizſhni Kovima, ſent by the commander of that place, making the number 94, excluſive of officers. The poor horſes employed in dragging timber from the woods exhibited ſuch a picture of miſery as perhaps never before exiſted; they were fed with bruſh-wood and the tops of willows, having neither graſs nor hay. They ſeldom worked longer than a fortnight, then tired and died.

Our only happineſs was derived from general harmony among ourſelves, and a reſolution to overcome every difficulty, to ſecure the means of leaving this worſt of all places in the world, as ſoon as the ice of the rivers ſhould break up, and afford us a paſſage.

Animated

Animated by this ſpirit, notwithſtanding the ſeverity of the weather, every thing went on with amazing ſucceſs. Our joy was increaſed, by obtaining for the Chriſtmas holidays a ſupply of meat from ſome Yakut chiefs who viſited us; and it was doubled toward the cloſe of the year by a proſpect of better times.

A man who rolls in affluence, and knows neither cares nor ſorrows, can hardly feel for thoſe of others, and is of all people in the world the leaſt qualified for pious deeds. Let him but viſit theſe regions of want and miſery; his riches will prove an eyeſore, and he will be taught the pleaſure and advantage of prayer. Let the advocates for the rights of man come here to enjoy them; for this is the land of liberty and equality! Nor will the Directory of the Great Nation, with all their great generals, ever poſſeſs it in perfection until they have reduced their country to the independent ſtate of this part of the globe; where a man ſees and feels that he is a man merely, and that he can no longer exiſt than while he can himſelf procure the means of ſupport.

Our diſtreſs, and hopes of relief from the mercy of heaven, led us one and all to devotion on the firſt day of January 1787: and never was a faſt-day in England more devoutly paſſed in prayer for plenty; for there never exiſted there, nor ever will, I hope, ſuch a ſcarcity.

The Yakut chief who had ſupplied us with horſes was this day rewarded for his attention and loſſes, by the preſent of a ſilver medal, which was faſtened about his neck with proper ceremony.

We had the ſun at this time three hours above the horizon, yet the cold by no means decreaſed; now and then, however, we

made a trifling excurſion, and were charmed with the appearance of partridges and hares, which induced us to ſend out our jagers for the benefit of the community; but they were not very ſucceſsful.

On the 14th of January Captain Billings propoſed a viſit to the Yukagiri (who reſide about 50 verſts from hence), to ſee their manners and cuſtoms, and procure a vocabulary of their language. He was accompanied by Dr. Merck, Mr. Robeck, our drawing-maſter, and myſelf; and we were conveyed on narti * drawn by dogs.

This method of travelling did not anſwer my expectation. We had 13 half-ſtarved dogs to each ſledge, which contained very little baggage; and I kept pace with them, walking the greateſt part of the way on ſnow-ſhoes. We were nine hours on the road; but about midway we made a halt to eat ſome raw frozen ſalmon, which I thought excellent, although it was the firſt time that I had ever taken my fiſh dreſſed by a 30° froſt; nor had I any other ſauce than ſalt and hunger.

We arrived pretty late in the evening, and put up at the hut of the chief; a man ſo remarkably ſtupid, that he could not tell us how many children he had till he called their names over, bending a finger to each; and, after all, they were only five daughters and two ſons. The whole number of inhabitants was 27 males and 23 females, including children.

After having taken a refreſhment of tea, with bread and butter, eight of the young women of the village came to entertain us

* Theſe are a kind of long ſledges, very narrow and low.

with

with ſongs and dances to a ſtrange inharmonious monotony of ſound; and their action was an unintereſting diſplay of their manner of hunting, ſkinning, and dreſſing the ſkins of animals.

The next morning we began to make our obſervations; but found that all their old cuſtoms were aboliſhed, and that the race was almoſt extinct. They call themſelves Andon Domni, and are ignorant who gave them the name of Yukagir. They are in tribes, and, beſides this place of reſidence, have villages near the eſtuaries of the rivers Indigerka, Yana, and Alaſey. Their cuſtoms were like thoſe of the Tungooſe, with whom they live in great friendſhip, and ſome of the tribes intermarry. The whole nation compriſes only about 300 males, as wars with the Tſhutſki and Koriaks have ſwept off great numbers, the ſmall-pox ſtill more; and the venereal diſeaſe now ſeems engrafted among them, as if finally to eradicate the race. They reſide at theſe habitations from the middle of December till the middle of February, while the weather is too ſevere for the chaſe; alſo in June and July, being the fiſhing ſeaſon. They frequent the ſources of the Kovima and Yaſaſhnoi in queſt of deer and wild beaſts, which they float in rafts to their dwellings, or bring in narti with dogs. They ſpeak Ruſſian very well, which enabled me to take a good vocabulary of their language. Their dreſs is now the ſame as the Ruſſians of theſe parts: it was formerly like that of the Tungooſe, whoſe tailors they ſtill remain, embroidering the ornamental parts of their cloathing, for which they receive in return articles of dreſs, ſkins, or furs. The Yukagiri call the Tungooſe Erpeghi.

On the 18th January we returned to our dwellings, and found every thing going on with alacrity. We ſet our coopers to ſtave-making, and began building boats and one baidar.

At the commencement of the month of February, the weather during the day began to be more moderate. On the 4th, we ſent a ſoldier to Seredni, or the Middle Kovima, to bake bread for the enſuing ſummer; and a cooper to Neizſhni, to make caſks: we alſo ſent Lobaſhkoff, a Coſſac Sotnik well acquainted with theſe parts, to purchaſe the meat of rein-deer of the inhabitants or wandering tribes about the Omolon; he was furniſhed with ſalt to preſerve it, and with money, tobacco, and trinkets, for the purpoſe of barter.

Not having any agent at Irkutſk for the purpoſe of diſpatching the articles that ſtill remained to be forwarded to Ochotſk for the expedition, it was thought neceſſary to ſend Captain-Lieutenant Bering to ſuperintend this buſineſs. He left this miſerable place on the 12th February, and took commiſſions from every officer for private ſupplies of neceſſaries, both of food and raiment.

The ſcurvy gained ground upon our people, affecting their joints, and contracting them, particularly the legs. A decoction of the Pinus Cembra was uſed, and alſo ſweetwart and quaſs, and with ſucceſs.

In the month of March we had our veſſels in a great ſtate of forwardneſs, and were warping planks for ſheathing. The days were pleaſant, but the night-froſts continued from 20° to 32°. On the 12th day of the month the ſnow-larks made their appearance, to my great joy, for they afforded me many a good dinner.

On the 1ſt of April, Captain Billings pitched his aſtronomical tent. On the 8th, a Yakut arrived, with 14 ſmall caſks of butter, which had wintered on the road; but brought no news of any

any more of Siberakoff's contracted articles. We were now making ſails; and a rope-walk was at work by the 20th.

On the 29th, ſwans were obſerved flying to the north; on the 23d, geeſe; on the 26th, ducks; and toward the end of the month we obtained abundant ſupplies; among which, we now and then obſerved a ſmall-ſized gooſe quite white. The ſcurvy entirely left us as ſoon as we returned to the uſe of ſolid food.

The 1ſt of May, at four A. M. we had 22° of froſt; and at eight A. M. 23° of heat in the ſun. Our people were now employed in caulking and preparing rigging for both veſſels, and making oars and ſweeps for the boats. Some hands were ſent to ſhoot birds, hares, &c. which were in great plenty, and not very ſhy.

All appearances were now as favourable as they had lately been diſcouraging; and perfect health, good ſpirits, and ſatisfaction, appeared in every countenance; when an accident, for the moment, threatened the worſt of conſequences. On the 14th, a little paſt midnight, we were alarmed by a fire breaking out at the dwelling of our mechanic, only a few yards from the ſpot where our veſſels lay on the ſtocks, quite ready for launching; and theſe were with the greateſt difficulty ſaved. All the brandy that had hitherto arrived for the uſe of the expedition, which conſiſted of 51 ankers, and was depoſited in a ſtore-room adjoining to the houſe, was conſumed. This accident was cauſed by the careleſſneſs of the inhabitant, who had made a fire-place in the entry cloſe to the wooden wall, where he dreſſed his ſupper, and left the fire burning.

On

On the 15th, the ice of the river Yaſaſhnoi began to move, and the following day it floated with the ſtream.

On the 17th, we launched the larger veſſel, and called her *The Pallas*, as a mark of the reſpect we bore to the very learned Doctor of that name, who was the chief cauſe of the expedition taking place; though the original ſuggeſter of it was the Reverend William Coxe, A. M. F. R. S. author of "An Account of the Ruſſian Diſcoveries between Aſia and America," and of many other valuable works, too well known to require mention in this place.

The water of the river had riſen 12 feet perpendicular, and remained ſo all the 18th. On the 19th, we launched the ſecond veſſel, which we named the Yaſaſhnoi, and the command of her was given to Captain-Lieutenant Saretſheff. The perpendicular riſe of the water on the 21ſt was 22 feet, even with the borders of the river; and the next day it overflowed the Oſtrog, and compelled us to retreat to the tops of our houſes, where we pitched our tents. The baidar and two boats were now finiſhed, and, carrying all the materials in them from the ſtore-houſes, we loaded our veſſels. The Pallas was cutter-rigged, and the Yaſaſhnoi had three lugs and a fore-ſail.

The perpendicular riſe of the water on the 24th was 27 feet. The face of the country reſembled an immenſe lake, and ſome of the tree tops appeared juſt above the water. In the afternoon all hands went on board. Mr. Main received the charge of ſuch as were not required with us, and directions to return to Ochotſk with all convenient haſte, to aſſiſt in conſtructing the veſſels there.

Virchni

Virchni Kovimſkoi Oſtrog is ſituated on a boggy ſpot, overgrown with willows and alder buſhes, bordering on the river Yaſaſhnoi, three verſts from its diſcharge into the Kovima. Its latitude is 65° 28′ 25″; and longitude, by ſeveral ſets of lunar obſervations, 153° 24′ 30″ eaſt; variation of two compaſſes 7° 33′ eaſt. The number of buildings that it contains I have already mentioned. The inhabitants are Coſſacs, their wives, and attendants.

A Coſſac at Irkutſk is employed, by the governor and chief officers, in the moſt contemptible drudgery, ſuch as cleaning the ſtable, ſcowering the kitchen, making fires, &c. At Yakutſk he is of more conſequence, and finds employment as tranſlator and emiſſary; but is faithleſs, ſly, and crafty. He lives in this part of the world like an independent chief, keeping Yakut labourers to aſſiſt his wife in all domeſtic drudgery, fiſhing, cutting wood, &c. Her particular province is to wait on her huſband, whom ſhe aſſiſts in putting on and pulling off his clothes, which ſhe keeps in good repair; ſhe alſo dreſſes his food and ſerves it up; and when he has made his meal, ſhe ſits down and eats with the reſt of the labourers.

Girls are frequently married to the Coſſacs at the early age of twelve; and, as it is a ſlave that they want, it ſeems a matter of indifference to them whether ſhe be Ruſſian, Yakut, Tungooſe, or Yukager, provided ſhe profeſſes the Greek faith. Both ſexes ſeem incapable of forming any tender attachment; the women are very inconſtant to their huſbands; and the worſt of diſorders is deeply-rooted among them and all their neighbours, having been introduced by Pavlutſki and his followers, who were ſent hi-

ther to ſubdue the Tſhutſki, and communicated this diſorder to all the other tribes.

The lordly Coſſac is only to be rouſed from his indolence by an order from his ſuperior; and then he curſes his fate, which has placed him under the control of others. Theſe laſt of mankind, unworthy of the name, theſe hardly animated lumps of clay, exert the moſt ſavage barbarity over their wives, children, animals, and the poor neighbouring tribes whoſe miſerable lot it is to pay tribute to them, or to be under the leaſt obligations, either by drinking a glaſs of brandy, taking a leaf or two of tobacco, or in any other way. They receive annual ſupplies of articles that are neceſſary, ornamental, or luxurious, from the traders at Yakutſk, to ſupply the different tribes with; rendering, in return, furs and mammont's tuſks. Their chief endeavour with theſe wanderers is, to get them indebted for any article that they may ſtand in need of, or to procure the receipt of a trifling preſent (which in honour they muſt return with one more valuable); but if they once get in debt, then they are perſecuted to the utmoſt, and are frequently neceſſitated to leave a man to work, or a woman, perhaps a daughter, as ſecurity for the payment.

I have here ſketched a faithful picture from the very men who are ſent hither to explain to the natives the benefits ariſing from the Chriſtian faith, and to ſet an example of loyalty and obedience.

CHAP.

CHAP. VI.

Departure from Virchni Kovima.—Seredni Kovima.—Inhabitants of the River Omolon.—Neizſhni Kovima.—Shalauroff's Wintering-place.—Laptieff's Mayak.—The Pallas conſecrated, and Captain Billings advanced in rank.—Paſſage much annoyed by Ice.—Spiral Bay.—Wolves' Bay.—Barranoi Kamen.—Captain Billings reſolves on declining any farther attempt to proceed, and the Command returns to Neizſhni Kovima.

MAY the 25th, at ſeven o'clock in the morning, we left Virchni Kovima Oſtrog, and falling down the Yaſaſhnoi, entered the river Kovima about eight.

It is impoſſible to give any deſcription of this part of the river, becauſe the ſhores and iſlands were overflowed. Its direction, however, is nearly north-eaſt, and the navigation was rendered extremely difficult, owing to the current in many places ſetting with great rapidity into the woods.

We arrived at Seredni Kovima on the 28th, at nine o'clock in the evening. This oſtrog contains 15 iſbas and a church; the inhabitants, though of the ſame claſs as thoſe at Virchni, are better circumſtanced, and much more induſtrious, cleaner, and healthier in their appearance; which I attribute to the ſpirit of emulation that they poſſeſs from the activity of the prieſt, who, like a good ſhepherd of his flock, attends them to their different fiſhing-places at the various ſeaſons of the year, and preſides over the diviſion;

upon which occaſion, however, though he were not preſent, there would not exiſt any diſputes. Fiſh are ſo extremely numerous, that, had not the ſeverity of the weather in winter prevented any communication, we might have received ample ſupplies at Virchni from hence.

This place is ſituated in latitude 67° 10′ 14″, longitude, by time-keeper, 157° 10′; variation of two compaſſes gave the mean, 9° 19′ eaſt.

Here we finiſhed an anchor, which was begun at Virchni; but the ſwell of the rivers prevented our proceeding with it: we alſo took in a ſtock of fiſh and bread.

The weather was very variable upon our arrival, with a ſouth-weſt wind, and extremely hot. But it ſoon ſhifted to the north, and on the 2d, 3d, 4th, 5th, and 6th of June, we had froſt and ſnow, with 4, 5, and 6° below 0 of Reaumur at nights; during the day-time the thermometer indicated 0, and one degree below it.

The river Kovima was not yet within its limits; but on the 11th we proſecuted our voyage. The eaſtern bounds of the river are broken perpendicular mountains, producing in ravines a few very ſtunted larch-trees. The weſtern ſhores are low, and in ſome places ſtill overflowed; but here and there an elevated ſpot produces a cluſter of very thin and low larch-trees. Our veſſels were frequently carried aground on the overflowed iſlands; but, by ſending out a ſmall hawſer into the main channel, and taking into the long-boat a few bags of flour, we got off. Such accidents as theſe, with contrary winds, prevented our arrival at the Omolon

ſummer-huts (ſix in number, oppoſite the river of the ſame name) before the 16th in the morning. Theſe huts are 350 verſts from Seredni, and were erected for the purpoſe of fiſhing, during the month of June only, by the inhabitants of the river Omolon, who are exiles, and the only people of theſe parts that have European countenances. They are in number nine males, the youngeſt 50 years of age, and about 12 females. They were emancipated by an act of grace about ten years ago, and pay a head-money equal to the Siberian peaſants. Their employment is fiſhing, ſeeking the tuſks of the mammont, and hunting animals about the neighbourhood. They trade with the Koriaki and wandering Tungooſe; they are, however, very poor, and pretend to be more ſo than they really are, to evade making preſents to the collectors, &c.

At theſe ſolitary huts we found Major Shmaileff, with two interpreters for the Tſhutſki and Koriak dialects. He has completely ſettled all diſputes, and reconciled the above two nations with the Ruſſians. They received him with great kindneſs, and aſſured him that they would aſſiſt the Expedition to the utmoſt of their abilities, and meet him on the ſea-coaſt near the Tſhaoon next ſummer. The Major brought with him a very great ſupply of dried deer's meat, which we took on board. He embarked in the Yaſaſhnoi; and we took the interpreters, Dauerkin and Kobeleff, into the Pallas.

The next day, being the 17th June, we proſecuted our voyage, and arrived on the 19th at the Oſtrog Neizſhni Kovima, on an extenſive iſland. Here are about 70 houſes, and a church; alſo an oſtrog, incloſing government ſtore-houſes, &c. in a ſquare of compact paliſadoes eight feet high, with four entrances each, ſupport-

ſupporting a tower. Theſe oſtrogs are for keeping priſoners in, and alſo to ſerve as places of defence, being pierced with ſmall holes to point a muſket through, and thick enough to repel a ſhot from the rifle-guns of the wandering tribes; latitude 68° 17′ 14″, longitude 163° 17′ 30″; variation 14° 14′ eaſt.

We took in a little ſalted deer's meat, left the Yaſaſhnoi to undergo ſome alteration in her rigging, and gave the prieſt orders to come in her as far as to the diſcharge of the Kovima, to conſecrate the veſſels, and to adminiſter the oath to Captain Billings; who, according to the mandate of her Imperial Majeſty, was to declare himſelf a Captain of the ſecond rank upon his arrival in the Icy Sea.

On Saturday the 19th June, at half-paſt ſix in the afternoon, we weighed anchor, with a moderate breeze from the ſouth-eaſt. The waters were much abated; the depth of the river was 12 fathom; its width three miles; and its direction about north-eaſt. Thirty-five miles below Neizſhni we obſerved the laſt tree; bruſhwood continued a little farther.

On the 20th, at nine A. M. we arrived off the place of Shalauroff's wintering in 1762; conſiſting of a large ſtore-houſe and double dwelling-houſe of wood in decay, under inconſiderable mountains, compoſed of ſlate and quartz, covered with moſs; great quantities of drift wood lying on the ſhore. The productions of the earth are willow and birch buſhes about eight inches high, and the diſtance about 80 verſts from Neizſhni. Captain Billings, Dr. Merck, and I, went on ſhore, and collected a few plants; as wolfſbane, a wild vetch (the root of which is the ſupport of the marmot), tanzy, and a ſpecies of rock fern (the leaves not exceeding three inches in length, with an aromatic taſte, and

pleaſant

pleaſant ſmell). Here we lay at anchor three hours. At three quarters paſt twelve we proceeded, the depth of the river decreaſing gradually to one fathom. At five P. M. we again came to anchor, and ſent out a boat to find the proper channel; the ſoundings varying much, ſix, ſeven, eight, and ten feet, deepening to ſeven fathom. At eight we again weighed, and found the width of this branch of the river 12 miles.

Notwithſtanding our navigation was impeded by ſhallows at the diſcharge of the river, where we frequently got aground, we cleared all of them about midnight, and caſt anchor oppoſite Laptieff's Mayak *, five miles from ſhore, in four fathom water: ſand-banks prevented our nearer approach.

On Monday the 21ſt June, at two A. M., Captain Billings took his aſtronomical tent on ſhore; and our naturaliſt, Mr. Robeck, and I, accompanied him. We could not get within two miles of the Mayak on account of the ſhoals, which compelled us to land in a bight two miles and a half more to the eaſt. On rowing towards ſhore in a ſmall boat, we got the Pallas's hull down, and ſhortly after ſhe diſappeared; increaſing our diſtance, ſhe was again ſeen, hull, rigging, &c. ſeeming of an immenſe ſize, and conſiderably above the horizon. The weather was rather hazy, and the ſun obſcured.

This morning we walked acroſs the head-land to the buildings in the next bight, which conſiſt of three iſba's adjoining each other under a hill; upon which is a pyramidical building 25 feet high, ſupporting a croſs, bearing the inſcription "SHALAUROFF, 1762."

* Beacon, or light-houſe.

1762." The huts were built by Laptieff and his company in 1739. Where he wintered, at a ſmall diſtance, is a croſs bearing an illegible ſuperſcription; and a ſtage, about ten feet high, covered with earth, upon which they made ſignal fires. The ſhores are covered with drift wood. This is the reſort of different tribes for the peſtſi, or ſtone fox; and numbers of falls, or traps, are placed in different parts. We obſerved the traces of wolves, and in the afternoon two approached very nigh to our tents. Two dogs gave chaſe to them, but were not equal in ſpeed.—Hazy and miſty weather.

On Tueſday the 22d, at eight P. M. the Yaſaſhnoi arrived, and caſt anchor about 100 fathom ſouth-weſt of the Pallas; hazy and miſty weather continuing. At midnight flying clouds; and at intervals the ſun viſible.

On Thurſday the 24th, at four A. M., we ſtruck the aſtronomical tent, without having been able to take a ſingle obſervation, owing to thick weather. At nine o'clock we went on board; Captain-Lieutenant Saretſheff and Major Shmaileff accompanied the prieſt to the Pallas, which veſſel he conſecrated, and after ſervice adminiſtered the oath to Captain Billings for his advanced rank. At eleven he returned in his boat to Neizſhni, and Captain Billings ſent diſpatches to the Governor-General of Irkutſk, with others to be forwarded to St. Peterſburg.

At noon we weighed anchor with a gentle breeze at ſouth ſouth-weſt, ſhaping our courſe north north-eaſt, the depth varying from one and one-fourth to three fathoms, and keeping a boat ahead employed in ſounding. At ſix P. M. we ſaw the firſt ice floating near the veſſel; immediately after, the wind ſhifted to north

north by eaſt, bringing a very thick fog. We came to anchor in four fathom, about four miles from ſhore. The Yaſaſhnoi anchored aſtern.

On the 25th, at ten A. M., a moderate breeze ſpringing up from the north-weſt, we again weighed, and ſtood to the north north-eaſt, the atmoſphere very foggy. At eleven ſaw great quantities of ice to the north; at five P. M. were quite ſurrounded with ice; ſoundings ſeven fathom, ſand and clay. At ſix the ice compelled us to ſtand-in for ſhore, having run about eleven miles north-eaſt. At eight, being about a quarter of a mile from ſhore, off a ſmall bight, caſt anchor in two fathom water. We ſaw four black bears on the beach, manned our jolly-boat, and ſent our chaſers after them; but in vain. At ten Captain Billings took his aſtronomical tent and apparatus on ſhore.

All the 26th was hazy and wet; great quantities of ice floating and collecting to the north-eaſt. Miſty weather continued all the 27th; and, on account of ice gathering about the veſſel, at nine P. M. we hauled her cloſe into a ſmall bight in ſeven feet water; but were obliged at eleven P. M. to weigh, and ſtand away to the weſt, the only paſſage open. We had a gentle breeze from the north-weſt, which, freſhening on the 28th, brought ice about us. We hauled about five miles weſt, and, getting into a ſnug bight, dropped anchor. On account of ſpiral rocks on the top of the mountains that bound the bay, we called this place Spiral Bay. At noon we had a ſight of the ſun; and, having ſent for our tent and inſtruments from our laſt anchoring-place, obſerved the latitude to be 69° 27′ 26″, longitude, by time-keeper, 167° 50′ 30″.

We had calms and variable light winds, with thick weather, till the 1ſt of July at noon, when we again weighed, the weather being hazy, with a freſh eaſterly breeze, keeping as near the eaſt as poſſible. At eight P. M. Captain Billings reſolved to ſhape his courſe north, to ſee how the ice was in that direction. We obſerved that the current carried us two points weſt, and our ſoundings gradually increaſed from four to 15 fathom. At midnight our rigging was covered with ice, the thermometer, about ſeven feet above the ſea, indicated one-half above the freezing point. Thick fog ſtill prevailed.

At two A. M. on the 2d, we got among very thick detached pieces of ice; which increaſing upon us, our depth decreaſed to nine and ſeven fathom. Wore ſhip, and bore away to the ſouth, having loſt ſight of the Yaſaſhnoi in the fog at ten laſt night. The ice was not ſo compact as to prevent our going farther; and from our ſhoaling water, I was inclined to think that we ſhould ſoon fall in with either the continent or ſome iſland; I therefore wiſhed that Captain Billings would have continued his northern courſe. The wind blew freſh; but the quantities of ice kept the ſea down, and the water was quite ſmooth. He was fearful of being entirely hemmed in, and was under ſerious apprehenſions for the ſafety of the Yaſaſhnoi, which was a ſmall ſlight-built lugger. At eight A. M. we got clear, and obſerved that the fog hovered over the ice only. At noon we came into a pretty deep bay (which we named Wolves' Bay, from our ſeeing ſeveral of thoſe animals on the mountains); and, dropping anchor, ſent three ſailors on ſhore, with directions to proceed to the next weſtern promontory to look out for the Yaſaſhnoi, and make a ſignal-fire.

On

On the 3d of July, at four P. M., we weighed, with a moderate ſouth-eaſt breeze, and ſtood off and on three hours for the ſailors on ſhore; when, the wind veering to north-eaſt, we again came to anchor near the ſame place. At midnight we had flying clouds, the ſun was viſible, and a beautiful rainbow was ſeen in the ſouth.

On the 4th, at five A. M., the ſailors returned on board, and ſaid that they had walked to Cape Kovima, where they made a ſignal-fire, having ſeen the Yaſaſhnoi at anchor about ten verſts off. She ſent her boat on ſhore to inquire after the Pallas, and at ſix P. M. came along-ſide.

On the 5th, at four A. M. again weighed anchor with a weſterly breeze; and, on account of drifting ice, with difficulty made about 14 miles eaſtward by three A. M. the ſixth, when we again came to anchor. At noon we got an obſervation for the latitude, which proved 69° 27′ 43″; longitude, by time-keeper, 168° 29′. Variation of four compaſſes gave the mean 17° 12′ 30″ eaſt. We now ſent the boat on ſhore to haul the ſeine, and caught about 300 herrings; we had tried in Wolves' and Spiral Bays, but without any ſucceſs.

On the 7th, at ſeven A. M., an officer was diſpatched with a boat round the next promontory, called Barannoi Kamen, to examine the ſtate of the ice. At nine in the evening he returned, and reported that the ice was compact to the very ſhore, leaving no kind of paſſage. Captain Billings walked round the promontory, and found the ice as the officer had ſtated. He ſaw an immenſe number of geeſe on a lake, and found two mammont's tuſks; one of which weighed 3 poods 17½ lb., or 115 lb. Engliſh

weight; the other was much ſmaller. Mr. Bakoff was ſent with a few hands to the lake to endeavour to obtain ſome wild geeſe. They proved to be in a moulting ſtate, and he collected in a ſhort time 98, with which he returned to the veſſel. While on ſhore, he ſaw ſeveral rein-deer, but could not ſhoot any.

All the 8th, we had calms and variable light airs. On the 9th, at two P. M. a moderate breeze ſprung up from the north-eaſt, which brought down upon us great quantities of floating ice, and made us ſeek ſhelter by weighing and ſailing weſtward. At four P. M. both ſun and moon were at times viſible; and Captain Billings took an obſervation for the longitude; but, flying clouds conſtantly obſcuring one or both, it could not be exact, although it pretty nearly agreed with our time-keeper; it proved 167° 57′ 40″, and might err, perhaps, one way or the other, a few miles. We anchored in Wolves' Bay on the 10th, at eight P. M., and remained till three A. M. on the 17th, when we again attempted to go to the north-eaſt with a moderate north north-weſt breeze, keeping as near the coaſt as convenient. We paſſed immenſe fields of ice, which obliged us to come to anchor cloſe in-ſhore, after having run about 14 miles.

On the 18th, we erected a croſs on an eminence. The next day, at nine A. M., obſerving the ſea more clear of ice, we weighed with a gentle north-weſt breeze, ſhaping our courſe along the coaſt north-eaſt. Obſerving a croſs on ſhore, we ſent to learn the inſcription, which was only "1762." About four P. M. we paſſed Barannoi Kamen, and got among pretty large detached pieces of ice, on one of which we caught a ſtone fox. We alſo ſaw two or three ſeals, and with a boat-hook caught one ſleeping on the water. The weather was hazy; and, the wind freſhening,

by

by ten P. M. we made 30 miles. The latter part of the time the ice increaſed about us, and ſome of it was eight foot above the water. Our depth was 10, 11, and 12 fathom. At eleven o'clock Captain Billings thought his ſituation dangerous; he therefore tacked, and ſtood back again, making a ſignal for the Yaſaſhnoi to do the ſame. At noon, we came to anchor cloſe in-ſhore off Barannoi Kamen, which promontory we had paſſed 15 miles, being about half-way to the next point of land, called by Shalauroff Peſoſhnoi Muis, and which is the ſouth-weſt cape of the Tſhaoon Bay.

On Tueſday the 20th July, at ſix o'clock in the morning, Captain Saretſheff came on board the Pallas, in conſequence of a meſſage ſent him; when Captain Billings informed him, that he was reſolved to give up all thoughts of any further attempt, and meant to return to Neizſhni Kovima as ſoon as the wind would permit.

On the 21ſt, at noon, we got a ſight of the ſun from on board: the latitude proved 69° 35′ 56″; longitude, by time-keeper, 168° 54′, Barannoi Kamen bearing ſouth, diſtant three miles. Peſoſhnoi Muis eaſt, diſtant 30 miles. Variation of the compaſs 17° 40′ eaſt.

A freſh breeze from the weſt continued, with ice drifting to the eaſt with the current, which now ſet at the rate of three miles uniformly eaſt, till midnight of the 25th July; when we obſerved the current ſetting in the ſame direction at one mile, with little wind from the north-weſt, which ſhortly after veered to the north-eaſt. Till this time we found the water freſh enough to dreſs food, and ſometimes quite freſh. With the north-eaſt wind, we obſerved

obſerved the current ſhift to the weſt, and the water became ſalt: we ſaw ſeveral ſeals, ſome ſmall whales called the Belluga, and one whale of a moderate ſize; circumſtances which induced me to think that we now might gain a paſſage. Mr. Saretſheff was firmly of my opinion, and offered to attempt it in our open baidar with ſix hands, meaning to ſleep on ſhore every night. The poſſibility of ſucceſs was farther confirmed by Mr. Shmaileff; but was not agreed to by Captain Billings, who took the ſignatures of the officers in teſtimony that it would be more prudent to return to Neizſhni Kovima. We experienced a conſtant ſucceſſion of ſnow, rain, and fogs; and the thermometer varied from the freezing point to 4° above it; nearer ſhore 8° and 7°. At ſeven o'clock in the morning of the 26th we weighed anchor, and ſtood away to the weſt for the river Kovima; and, after encountering ſome difficulty in getting over the flats at its eſtuary, arrived on the 29th July, at eight o'clock in the morning, at Neizſhni, delivering up the veſſels and ſtores to the commander of the place.

To conclude the detail of this ſhort excurſion, I ſhall ſubjoin the following remarks: The coaſt of the Icy Sea is moderately high, formed by projecting promontories and ſhallow bays, expoſed to every wind except the ſouth. The mountains are covered in different places with ſnow; which melting, produces ſmall torrents ruſhing into the ſea. They are compoſed of granite, quartz, and a hard black ſtone; and produce moſs; a kind of vetch, the root of which is edible; creeping willow; and birch, not exceeding ten inches in height. The ſhores are covered with drift wood nearly to Barannoi Kamen, but no farther eaſt. Along the ſhore are numerous remains of huts, and places where fires

have been, which, in all probability, have been made and left by different hunters.

The quadrupeds that we ſaw were rein-deer, pretty numerous; bears, but none white; wolves, foxes, ſtone fox, wild ſheep, and the whiſtling marmot. The birds were, gulls of ſeveral ſorts, ravens, hawks, black-headed buntings, ſnow-larks, a few partridges, geeſe, ducks, and divers.

The productions of the ſea are very few. We frequently hauled the ſeine, but only once caught the ſeld (herring) and muk-ſoon (a ſmall ſpecies of ſalmon). We ſaw ſeveral belluga, ſeals, and one whale, but no traces of ſhell-fiſh of any kind. The water was freſh to a conſiderable diſtance; the ice we frequently tried, but found it brackiſh, with neither ebb nor flow. The currents were very irregular, ſeldom ſetting any one way longer than the wind blew, at the unſettled rates of half a mile, a mile, and three miles and a half, per hour.

The atmoſphere was cold and chilly, the greateſt heat that we experienced being while at anchor cloſe in with the land in Wolves' Bay on the 15th July, when we had ſeveral claps of thunder. We had a gentle ſouth-eaſt breeze, and calms; and while the wind blew, the thermometer roſe to 14° and 16° above the freezing point of Reaumur. During the intervening calms, it ſunk to 6°, 7°, and 8°. The coldeſt day was the 12th July, the thermometer being then 2° below the freezing point. It frequently indicated 1° above 0 at the time when our rigging was incruſted with ice.

The

The fogs here are very remarkable, continually hovering above the ice at no great height. At a diſtance they appear like iſlands in a haze; ſometimes like vaſt columns of ſmoke. Once, in particular, we thought that the Tſhutſki had made ſignal-fires for us; but on a nearer approach we diſcovered our miſtake.

I obſerved the horizon to be moſt clear in the coldeſt weather, and am inclined to think that this navigation ought to be undertaken about the firſt of Auguſt. The more ſucceſs is to be expected, from the teſtimony of the hunters and others who viſit theſe parts, "that the ice never breaks up until St. Elias' day, the 20th July, Old Stile (or the 31ſt July New Stile"); and I think it neceſſary to remark here, that my dates are all Old Stile, according to the cuſtom of Ruſſia.

The eſtuary of the river Kovima at Shalauroff's winter buildings, by exact reckonings of bearings, courſe, and time, from places where obſervations were taken in the Icy Sea, and from Neizſhni Oſtrog, forwards and backwards, I fix in latitude 69° 16′, longitude 166° 10′; variation of the compaſs 17° 30′ eaſt.

The following is the reſult of my remarks and inquiries during my ſtay at Neizſhni Kovima:—I obſerved ſwallows ſwarming together under the eaves of the church, chirping very much, particularly on the 2d Auguſt; and on the 3d there was not one to be found, nor had any body ſeen them depart. I was informed, that they made their appearance about Tzarivoi day (21ſt May), and departed on the (days of Spaſs) 2d and 6th Auguſt, never ſtaying beyond the latter date; the red-breaſt remains a day or two longer than the white. The ſnow-bunting, the firſt bird that appears,

appears, is ſeen about the middle of March feeding on the ſeeds of graſs on the ſandy ſhores of the river, and about the roots of buſhes where the ſun firſt melts the ſnow; different flights purſue each other in their migration for about a month; eagles follow cloſe upon them. Swans, geeſe, and ducks, arrive toward the end of April, and continue about the neighbouring lakes and rivers till the beginning of September. The river is frozen over about the 20th September, and opens about the 24th May, when it deluges the low country. The water does not retreat within its bounds till the end of June.

On the 25th November the ſun ſets until the 1ſt January, when it again appears above the horizon; and this is the time of the ſevereſt cold.

CHAP. VII.

Departure from Neizſhni Kovima Oſtrog.—Yermolova Tona.—Towing by Dogs.—The Mountain of Konzſheboi.—Seredni Oſtrog.—Natural Hiſtory of the Kovima.—Sketch of the Inhabitants on its Coaſt.—Information derived from an old Coſſac, and others, reſpecting the fate of Shalauroff.—Arrival at Yakutſk.

Captain Billings, Dr. Merck, Mr. Robeck, our Ruſſian ſecretary Vaſſiley Diakonoff, and I, with a neceſſary number of ſailors, departed from Neizſhni Kovima Oſtrog on the 6th of Auguſt at four P. M. with the two boats and the baidar, in 4° of froſt, rowing and hauling againſt the ſtream. At eleven o'clock at night we arrived at Yermolova Tona, a fiſhing place reſorted to by the inhabitants of Neizſhni during the ſeaſon. Mr. Saretſheff and the reſt of our company were left to follow us in the tranſport veſſel, which was hourly expected to bring proviſions for the Coſſacs. On arriving here, we were informed that this veſſel had paſſed about two o'clock in the afternoon; but, owing to hazy weather, we did not ſee it. We were alſo told, that diſpatches from Ruſſia were in the poſſeſſion of a courier paſſenger. A boat was immediately ſent, and we waited till the next noon for our papers, chiefly letters. I was favoured with one from St. Peterſburg, and another from Brigadier-General Troepolſky of Irkutſk.

We proceeded at two P. M., having obtained one lodka, or canoe; but found extreme difficulty in getting on with our boats

and ſo much baggage; in conſequence of which, Captain Billings left every article, except the proviſions, with Vaſſiley Diakonoff on ſhore, in the morning of the 9th, and diſpatched the baidar to Mr. Saretſheff with intelligence of the contents of our papers, &c. At ſix o'clock in the evening, we arrived at three uninhabited huts belonging to the villagers of the river Omolon, and took poſſeſſion for the night, which was very ſtormy, with ſnow. The thermometer was at 0; and, the gale continuing all the next day with ſnow and rain, we were glad to keep ſo good a birth. One of our ſailors, a chriſtened Koriak, who formerly reſided a ſhort time on the Omolon, recommended, as the moſt eligible method of getting forward, canoes to be drawn by dogs on the beach againſt the ſtream of the river. He told Captain Billings, that the village was only ten verſts by land acroſs the oppoſite cape, and that he knew the road perfectly well. His advice was taken; and on the 11th, at noon, the wind abating, I received the Captain's directions to take the boats and men to the huts oppoſite the diſcharge of the Omolon, where he purpoſed meeting me; and he, Dr. Merck, and Mr. Robeck, ſet out with the ſailor before mentioned, and a ſoldier. The width of the river being about a mile and half, and the wind blowing very freſh from the weſt, with great difficulty they gained the oppoſite ſhore, quite wet; the boat returned at ſix P. M.

Bad weather detained me till the 13th in the morning, when it blew a moderate breeze, and I ſet off with two boats and the canoe. After making, with great difficulty, 15 verſts, half-way to the huts, the wind increaſing to a gale, I was obliged to take ſhelter under the high eaſtern ſhore, where I paſſed the night, and arrived at three o'clock in the afternoon of the 14th at the huts,

which Captain Billings had reached but two hours before me. We were now 110 verſts from Neizſhni.

The Captain told me, that, owing to the difficulty they experienced in croſſing the Kovima, and the ſwampy road that they had to travel, which was knee-deep in wet moſs, they did not arrive till the next noon at the habitations, after paſſing a ſhocking night, ſleeping on the moſs, in the ſnow and wind, without any covering or ſhelter: Dr. Merck and Mr. Robeck, the ſurgeon, had their toes frozen.

Sunday the 15th Auguſt, at eight o'clock in the morning, Captain Billings, myſelf, two attendants and four guides from the Omolon village, proceeded on our voyage to Seredni, leaving Dr. Merck and Mr. Robeck to follow in the boats. Croſſing the river, we put our harneſſed dogs on the beach, and they hauled us 40 verſts, to a famous mountain called Konzſheboi, where we pitched our tent, and paſſed the night. We obſerved wild onions, thyme, tanzy, tſhornoi golovnik, currant and roſe buſhes, about the ſhores; and in the fiſſures of the rock, juniper, creeping cedar, and here and there a ſtunted larch-tree. The compoſition of the mountain is granite and quartz. On the beach were numberleſs ſmall pebbles of carnelian and calcedony.

We conſtantly travelled at the rate of 50 or 60 verſts each day, until the 22d, when we arrived ſafe at Seredni Oſtrog, 460 verſts from Neizſhni.

The eaſtern ſhores of the river are uniformly mountainous, producing agates, jaſper, porphyry, and cryſtals; and we ſaw ſeveral Yakuti on hunting parties.

On

On the 25th, Dr. Merck and Mr. Robeck arrived; and Mr. Saretſheff, with all our party, joined us in the tranſport bark on the 28th.

Of the neighbouring Yakuti we ſent to requeſt a ſupply of horſes to convey us to Yakutſk, with the earlieſt winter roads. The inhabitants were, for the greater part, at their autumnal fiſhing huts on the river Euxeva, 40 verſts up the Kovima, when we arrived; but returned a few days after with a plentiful ſupply of fiſh, berries, roots, &c.

On the 20th September the river was frozen over; and on the 22d, the inhabitants made a kind of dam nearly acroſs, by ſticking poles upright quite cloſe together, only leaving openings for inſerting nets and wiers, to catch a winter's ſupply of freſh fiſh.

The nets were examined twice a day, and generally found well ſtocked with nelma, mukſoon, omul, and ſeld (a kind of herring), a few ſtirled alſo were now and then caught; and theſe were thrown on the ice to freeze, the only method adopted to preſerve them. The weather was clear and cold, with from 5 to 10 and 16° of froſt.

The river Kovima takes its riſe from the Virchoyanſky chain of mountains, and flows in a direction nearly north-eaſt about 1800 verſts. Virchni, or the upper Oſtrog, is about the middle of its courſe, and very few fiſh aſcend higher. Near its ſource are three huts and a ſtore-houſe, called Virſhinoi, where government ſupplies of proviſions are houſed, and barks built for their conveyance down the river.

Fiſh

Fiſh are very plentiful, of which the following ſorts are caught:

Engliſh Names.	Yakut Names.	Ruſſian Names.
Sturgeon.	Katus.	Oſêtre; called by the inhabitants of the Kovima Shtſhalbyſh—July to October.
Salmon.	Tut Balyk.	Nelma; large white ſalmon 2½ to 4 feet long, weighing upwards of 60 pounds—July to October.
Ditto.	Mungur.	Chir or Tſhir; 20 inches—May to November.
Ditto.	Mukſoon.	Mukſoon; 15 to 18 inches, ſilvery ſcales—Sept.
Ditto.	Omul.	Omul; 12 to 14 inches—Ditto.
	Seld.	Seld; reſembling a herring, ſilvery looſe ſcales—Ditto.
	Shookur.	Sieg; 12 to 15 inches, ſilvery ſcales—May to November.
Quab.	Selu Sar.	Nalime; to 5 feet long, reſembling the cod in ſhape and taſte; has one beard; the liver extremely large; and I have extracted a full pint of fine pellucid oil from one: by putting it over a ſlow fire in a frying-pan, and cutting it, almoſt all the liver has been diſſolved.
	Baring Ata.	Peledi; ſomewhat reſembling a carp in ſhape, but quite white ſcales: bony.
	Tſhukutſhan	Tſhukutſhan; about 20 inches long, quite round and firm; about 7 inches in circumference in the thickeſt part, gradually tapering to the tail, which is forked. It has two dorſal fins, very compact and fine ſcales, and a thick ſkin. The head rather flat; pointed griſtly noſe; the mouth is underneath, about 2 inches from the tip, ſhaped nearly like that of the leech, without teeth; a very bony fiſh; fleſh white. They are rather ſcarce, and not eſteemed for food.
	Booyit.	Lenok.
		Koniok.
	Dyrga.	Charius.
	Kiuſtak.	Chebak.

Perch.

Engliſh Names.	Yakut Names.	Ruſſian Names.
Perch.	Alſhre.	Okun, } plenty in all the ſtony rivulets.
Stone ditto.	Taaſbas.	Yerſh ; }
Char.	Sobo.	Karas ; chiefly in lakes.
Trout.	Kaſil balik.	Kraſnaia riba ; ſcarce.
	Irungk bulyk.	Neſnaki ; a white fiſh ſhaped like a trout ; very ſcarce.
	Timir atta.	Zſheleznoi noga.
	Turuchan.	Nerpiſki ; ſhorter and broader than the ſeld.
Minnow.	Soluro.	Monduſhka.
Pike.	Sording.	Shtſhuk ; ſome of a moſt extraordinary ſize. I ſaw one caught in the lake Kyſla, near Zaſhiverſk, about 6 feet long, and weighing 108 lb. or 3 poods. The back, towards the head, was covered with a kind of moſs. I ate ſome of it, and found very little difference between the flavour of it and the ſmaller ſort.
	Irungka, - -	reſembling in ſize and appearance a ſprat or anchovy ; perhaps the ſame kind of fiſh as is caught at Revel, and called Strömlingi.

The mukſoon, omul, and ſeld, come in very great ſhoals in September, are very numerous for about 10 or 15 days, and depart ſhortly after the river cloſes. They do not aſcend ſo high as Virchni. Nelm, tſhir, or chir, and ſieg, are caught all the year as high up as Virchni ; and the greater part of ſuch as are caught in the ſpring and ſummer are ſplit and dried, and the bones taken out, from which the inhabitants extract a great quantity of oil, as alſo from the fat about the guts. The ſeld yields a great deal. What I have called the ſturgeon is, in my own opinion, the ſtirled. I do not know the difference (nor did any one in our Expedition), but judge from the ſize ; for I never ſaw one that weighed more than 40 lb., and the ordinary weight was from 5 to 10 lb. ; yet, owing to their extreme fatneſs and firmneſs, I am inclined to think that the rivers of theſe parts are favourable to them ; and the ſturgeon that I have ſeen in other

parts

parts are three times as large, without being ſo fat, firm, or well flavoured: all, except this one ſort, are caught as well in lakes as rivers, where they paſs in the floods and thrive very well, particularly the tſhir and ſieg.

The inhabitants fiſh with the ſeine in ſummer; and in winter they plant oſiers nearly acroſs the river, ſo cloſe as to preclude the fiſh from paſſing; but leaving openings for wiers and nets.

The Beaſts that infeſt the neighbourhood are:

Engliſh Names.	Ruſſian Names.	Yakut Names.	Time of the Chaſe.
Elk.	Sochata. Loſs.	Toyak.	September, October, and November.
Deer.	Olen.	Miniak.	

Spring bows are ſet, with a ſtring leading to the path which they take. In April, and the beginning of May, they are chaſed on ſnow-ſhoes. At this ſeaſon, the ſun in the day-time thaws the ſnow, which the night froſt hardens enough to ſupport a man and dogs, though the animals always break through, and cannot extricate themſelves. Immenſe numbers of deer are ſlain in Auguſt, on ſwimming acroſs rivers in returning to the woods from the borders of the Icy Sea, whither they retreat in ſpring to ſhelter themſelves from the flies and inſects that infeſt the foreſts. Their migration is very curious. They herd all together; and I am told, that the males form the van and rear, while the females are incloſed in the centre: Bears and wolves follow them, deſtroying ſuch as ſtraggle from the main body; foxes lag behind and clear the remains. Thus do I account for the appearance of bears, wolves,

wolves, and foxes, ſo far beyond the foreſts. Eagles and other birds of prey hover over the deer at the time of their migration, and give the earlieſt intimation to the hunters of their near approach. On their taking the rivers, the hunters man their canoes; two men with ſpears in ſome, while others are occupied by boys and women, furniſhed with long cords, which they throw over the horns of the ſtabbed deer, and tie one end to ſtakes or trees on ſhore. I have not, however, been fortunate enough to ſee them at this time—Price, elk ſkin 2, doe ſkin, 1 ruble.

Engliſh Names.	Ruſſian Names.	Yakut Names.
Bear.	Medved.	Ehea; Eſſe; from May till late in September—Middling ſkin, 1 ruble.
White Bear.	Beloi Medved.	- - -; about the Icy Sea. We did not ſee any—1 ruble.
Glutton.	Ryſomag.	Siégan and Begó; all the winter; not numerous—2 to 10 rubles.
Wolf.	Volk.	Beréh; never ſought after in theſe parts—2 to 8 rubles.
Fox.	Leeſits.	Safil; numerous, and much looked for in October and November—According to quality, 1 to 5 rub.
Stone Fox.	Peſſets.	Kirſa; October and all the winter—50 copeaks.
Ermine.	Gornaſtal.	Belilak; all the winter in woods near habitations, and frequently about the flour magazines—5 copeaks.
Lynx.	Rys.	E-us; autumn and all winter—3 to 10 rubles, according to the length of hair.
Otter.	Vūidra.	Itie; ſummer—8 and 10 rubles.
Sable.	Sobol.	Kies; very ſeldom caught about the Kovima—10 rub.
Sheep. Argali.	Baran.	Tſhubèk; about the mountains at the ſource of the Kovima, and all over the Virchoyanſki chain to Kamtſhatka—1 ruble.
Hare.	Zaits. Uſhkan.	Kobach; all the winter; but chiefly when the firſt ſnow falls—3 to 5 copeaks.
Marmot.	Tarbagan.	Tarbagan, much eſteemed by the Yakut for food and
Ditto.	Suſlik.	Kutier; dreſs. They paſs the winter under

 ground,

ground, have ſeveral chambers in their holes, and lay in a conſiderable ſtock of graſs and ſweet roots; alſo the nut of the cedar—5 to 10 copeaks.

Engliſh Names.	Ruſſian Names.	Yakut Names.
Squirrel.	Belka.	Tee-ing; ſpring and autumn—3 to 5 copeaks; eſteemed good eating by the different tribes.
Flying do.	Letuſhka.	Tirik-annat; *annat* is winged; *tirik* is ſkin—Of no value.
Striped do.	Burunduk.	Burunduk; 2 copeaks.

The three ſpecies of ſquirrel paſs the winter in hollow trees, or under ground, in the ſame manner as the marmot.

Mountain. Whiſtling rat.	Piſhuka.	Kyla.	never ſought after—Worth nothing.
Sharp noſed. Com. mouſe.	Müiſh.	Kutuyak;	

The Birds conſiſt of the following kinds:

Engliſh Names.	Ruſſian Names.	Yakut Names.
Swan.	Lebed.	Kubah; appear about the 20th April, and depart in September.
Gooſe.	Gooſe.	Kaas; appears and goes a few days later.
Duck.	Utka.	Kus; are in great variety, and numerous.
Eagle.	Orel.	Baruldo; black.
Ditto.	Ditto.	Toyon; white head and tail.
	Skopa.	Umſan; of the eagle or hawk kind: darts in the water for fiſh.
	Yaſtrip.	Kirt.
	Kretchet.	Ditto.
	Korſhoon.	Togolak.
	Sokol.	
Owl.	Filen.	Mokſoghol and Karali.
Gull.	Chaika.	Kopta.
Small black head. Gull.	Marteſhka.	Tiraghi.
Crane.	Zſhurav.	Turuja.
Stork.	Sterch.	Kutelik.
Partridge.	Kuropatka.	Kabdſhi.
Raven.	Voron.	Sor.
Crows.	Varonna.	Tarak.

Engliſh Names.	Ruſſian Names.	Yakut Names.
Divers.	Gagara.	Koghas.
Black Game.	Tetere	Ulōer.
Black woodpecker	Dſholna.	Kirgil.
Woodpecker.	Datel.	Tonoghas.
Swallow.	Laſtoſhka.	Karangachuk.
Thruſh.	Droſd.	Tatſheger.
Snow-bunting.	Snegir.	Tulak.
Snipe.	Kulik.	Sulbaraga.
Cuckoo.	Kokuſhka.	Kuga.

The eagle and hawk kind, I am informed by the Yakuti, as alſo by the different inhabitants here, are dormant in hollow trees during the winter.

Liſt of Trees, Buſhes, and Berries.

Larch—This is the chief tree in uſe, for building, firing, &c. and the moſt plentiful. It is pretty ſizeable as far as Virchni, and the country is moderately wooded about 200 verſts lower, but the trees very ſtunted: beyond that, they are in cluſters on elevated ſpots of ground to about 30 verſts from the Icy Sea, where they ceaſe growing, in about the latitude of 68° 30′.

Birch; extends to a little below Seredni; but very ſtunted and ſmall trees.

Poplar and Aſp; grow to a moderate ſize on the iſlands ſheltered by mountains, about the ſource of the Kovima; but do not extend ſo low down as Virchni.

Mountain Aſh; plenty as far as Virchnoi, but very ſcarce lower down.

Alder and Willow; have a trunk about 18 inches in circumference, and grow to the height of 2 fathom about Virchni. They gradually diminiſh in ſize, and ceaſe growing with the larch.

Creeping cedar, bruſhwood, black and red currant, roſe and juniper, are met with as low as Neizſhni. Bruſhwood and creeping willows extend to the Icy Sea, but never exceed from 6 to 8 inches. The creeping cedar, or pinus cembra, produces a conſiderable quantity of ſeeds or nuts in cones, like the common pine; but they ripen only the ſecond year. Immenſe numbers are collected by the inhabitants; ſometimes a conſiderable quantity are found in the ſquirrels' neſts in hollow trees; in fact, they are the chief food of ſquirrels and mice. A very pellucid and ſweet oil is extracted from theſe ſeeds.

Berries.

Mountain aſh berries; are gathered, and uſed to give a pleaſant flavour to their drink.

Black and red currants; collected in abundance, and preſerved in caſks among ice; ſome

are boiled and preſerved. The black only extend to about Seredni; but the red continue growing as far as Neizſhni.

Cranberry—Theſe are ſcarce, and extend no farther north than Seredni: they are always preſerved raw.

Bruſniki; Vaccinium vitis idæa; Whortleberry—Theſe are very plenty as far as Neizſhni, and are preſerved raw.

Golubniki; are very numerous. They ſeem to delight in ſuch ſtony places as are overflowed in the ſpring. They are very pleaſant-taſted; of a dark blue colour; and grow on a low buſh exactly reſembling a myrtle. They are preſerved by boiling.

Maroſhka; Rubus chamæmorus—Theſe are the favourite berry of the inhabitants, and grow in damp moſſy places, particularly near lakes. They are reckoned a certain cure for the ſcurvy; and are always preſerved raw.

Siecha; growing on dry ſtony places about the mountains, on a creeping ſpecies of heath, with ſhort needle leaves; they are very ſmall, black, and ſtony, are collected in great abundance, and preſerved by boiling.

Knezſhnitſi; Rubus Arcticus; are ſcarce, growing about the roots of the alder and currant buſhes.

The inhabitants of theſe parts prepare their food in the following manner:

Beſides boiling and frying fiſh, as is done in every country, ſoups are made of quabs, karas, and perch. The upper part of the head or griſtle of the nelm, ſieg, and tſhir, are boiled, and ſerved up cold as a whet, with ſalted onions, and the juice of cranberries inſtead of vinegar. They bone boiled fiſh, then beat them in a mortar to the conſiſtence of paſte, make it into the form of a pie, putting into it either the ſeld, the heads of ſalmon, or, which is reckoned beſt, the liver of the quab, and bake it, with or without onions.

The ſpawn of fiſh beat up in a mortar, ſometimes mixed with flour, and fried with onions, is called baraban; if fried like a cake

cake without onions, and preſerved berries put on the top, it is called ſhangee.

Pike are ſkinned, and beat up raw, with onions, wild thyme, and pepper, made into force-meat balls, and inſerted in ſoups and fiſh pies; and ſometimes made into cakes, and fried. They are called telnée.

The thick gut of fiſh, particularly the quab, is boiled, and ſerved up cold, with different berries, by way of deſert after dinner.

Their drink is the fermented juice of berries mixed with water. They make vinegar, or rather a good ſubſtitute for it, by fermenting onions with flour, or the pounded inner bark of the larch; and I thought it very good.

An infuſion of wild thyme, of dog-roſe leaves and ſtalks, and of the plant called tſhernoi golovnik, is uſed inſtead of tea.

Tuſks of the mammont are found very numerouſly about the ſandy high ſhores of the river, at a conſiderable depth; and the ſpring floods waſhing away the ſand diſcover them. I am not at all ſurpriſed at their being buried ſo deep; for every ſpring the flood leaves immenſe quantities of ſand and earth on the ſhores of the rivers; perhaps to the depth of two to three inches, and among buſhes much more. They are equal to elephants' teeth in whiteneſs and beauty, but very different in their ſhape, being all bent ſpirally, forming about one round and a half. The largeſt that we found, which was on the ſhores of the Icy Sea, meaſured as follows, French meaſurement:

Length,

	Feet.	Inches.	Lines.
Length, with the bend, - -	8	7	4
Diſtance from one end to the other, ſtraight, -	4	1	9
Circumference near the root - -	0	14	3
The thickeſt part 22 inches from the root -	0	17	8
Of the middle - - -	0	15	8
Of the point - - -	0	9	5

Weight 137½ lb. Ruſſian weight, equal to 115 lb. weight avoirdupois.

The outſide was very brown from its having been expoſed to the weather; and it was cracked through the coat, or upper ſtratum, about an inch. The inſide was quite firm, and very white.

The horns of another animal are frequently found, adhering to a part of the ſkull, and reſemble very much thoſe of the buffalo. The elaſtic part of theſe are much eſteemed by the Tungooſe, &c. for ſtrengthening their bows.

I am ſorry that my want of knowledge in natural hiſtory, mineralogy, and botany, prevents my giving a better account of theſe almoſt unknown parts. Had we been accompanied by any ſkilful perſon, I ſhould have made this ſcience a chief part of my ſtudy. Situated as I was, I obſerved every circumſtance as well as I could, and communicate my remarks in the beſt manner I am able.

I ſhall now lay before my readers the reſult of my inquiries among the inhabitants.

Daniel

Daniel Tretiakoff, a Coſſac in the 90th year of his age, gave me the following intelligence :—" I came here in 1739 with a " commiſſary, who was ſent to collect tribute ; and I was de- " tained here as interpreter by Laptieff, who made an attempt to " croſs the Icy Sea, and returned late in the ſame autumn. Virch- " ni was then inhabited by exiles, who were trading pedlars. " Yukagers were very numerous then ; and I believe they de- " rived the name from one of their warriors : thoſe of the Omo- " lon, were called Tſheltiere ; thoſe of the Alaſey, Onioki ; and " thoſe of the Anadyr and Annui, Tſhuvantſi and Kudinſi. Wars " with the Tſhutſki and Koriaks, and fatal diſeaſes, have almoſt " extirpated the race. I have heard of a numerous nation inha- " biting the Kovima, called Konghini, and think it was from " them that the river obtained the name of Kovima. Remains " of many villages were ſeen on the borders of the river, and " numbers of ſtone hatchets, and ſtone pointed arrows, have been " found about their ruins.

" There were but very few Yakuti when I firſt came ; and I " believe that none of them were here 70 years back. The pro- " viſions for ſupplies to Kamtſhatka and Anadirſk uſed to be ſent " from the Kovima, up the river Annui, and down the Anadir. " At that time traders frequently viſited us, and very fine ſables " were caught in abundance, particularly about the Omolon.

" On Pavlutſki's return from his firſt attempt to ſubdue the " Tſhutſki, the oſtrog at Neizſhni was full of women priſoners. " Numbers were returned ; ſome he attempted to ſend to Ruſſia, " but every one of them died on the road."

He gave me the following account of Shalauroff's expedition in 1762 :

" In

" In the beginning of the year, Ivan Bachoff, his aſſociate, an " exiled naval officer, died at Neizſhni, and left Shalauroff to exe- " cute the enterpriſe alone. About St. Elias's day he weighed " anchor from his winter buildings at the eſtuary of the Kovima. " His followers were exiles and runaway ſoldiers, not hired to " receive pay, but volunteers, to receive a proportionate ſhare of " the produce of the voyage, intended in queſt of ivory and furs. " Of ſuch as could write and read he made officers, and the " ſubordinates were mutually agreed upon.

" He had ſailed but a very little way before he encountered " contrary winds, which detained him till the 10th of Auguſt. " Much ice was in ſight, but none near the veſſel. He now " kept well in with the ſhore, paſſed Barannoi Kamen, and " reached a point of land to the eaſt, which may be ſeen in clear " weather. Here the ice incloſed them three days, and damaged " the rudder, which, however, was ſoon repaired. This point " of land is the ſouthern cape of a deep bay, at the entrance of " which is an iſland of moderate ſize.

" The weather was very cold, and the crew wanted to ſeek for " a wintering place. Shalauroff, finding the ſea moderately clear " of ice, endeavoured to perſuade them to go farther; to which, " however, they would not agree; and on the 25th Auguſt he " ſteered into the bay, round the northern extremity of the iſland, " to ſeek a place wherein they might paſs the winter; but as there " was neither wood nor fiſh to be obtained, and his crew would " not liſten to his perſuaſions to continue their voyage, he was " compelled, againſt his inclination, to return to Neizſhni. Here " his companions diſperſed, but he himſelf went to Moſco. In " 1764 he undertook another voyage under the ſanction of govern- " ment; but he never returned, nor was afterwards heard of."

Dauerkin,

Dauerkin, our Tſhutſki interpreter, aſſured us, that Shalauroff's veſſel was found drifting, near the mouth of the Kovima, in the autumn of the ſame year that he put to ſea; and that his people were found frozen to death about 20 or 30 verſts eaſt of Barannoi Kamen in a tent, with proviſion, ammunition, and arms. I note this piece of information, although I think it very inconſiſtent, and do not believe it.

Affanaſſy Kaſſimoff, an inhabitant of Neizſhni, who formerly reſided at Anadirſk, aſſured me, that in the year 1766, or 67, the Tſhutſki brought him ſeveral paintings of Ruſſian ſaints; that ſome of them had cloth jackets, and that they were deſirous to get gunpowder. They ſaid, that they had found theſe things on ſhore. This was in the ſpring of the year; and he ſuppoſed that it was the property of Shalauroff and his people, of which they had been pillaged, and afterwards probably murdered, by the Tſhutſki. They ſaid that the articles were found to the north of the bay of Anadyr. I am inclined to think that Shalauroff doubled the capes, and was cut off in attempting to paſs the winter among the Tſhutſki.

On the 23d September we obtained a few horſes, and on the 25th diſpatched the firſt party to Yakutſk with Mr. Bakoff. On the 28th, Mr. Saretſheff departed with the chief hands. Captain Billings and I followed on the 8th of October. We croſſed the Alaſey mountains at the ſource of the river of that name, and came into the ſame road that I had taken from Zaſhiverſk, at which place we arrived the 22d October, and remained there three days: we then proceeded, croſſed the Virchoyanſki chain at the ſource of the Yana, and arrived at Yakutſk on the 13th November, after ſuffering inconceivable hardſhips from the ſeve-

rity of the cold, and travelling on horſeback. I computed the diſtance at 1300 verſts in the ſummer ſeaſon; but have every reaſon to believe, that it muſt be 2000 or 2300 verſts, when travellers are compelled to go round the bogs and lakes, and to ſeek fordable places in the rivers: the Yakuti and Ruſſians call it 2500 verſts.

On the ſouth ſide of the Virchoyanſki mountains, the face of the country is leſs barren; and, in addition to the trees before mentioned, are the fir and common pine in abundance, and of large ſize.

CHAP. VII.

Meet with Mr. Ledyard, who travels with the Command to Irkutſk.—He is arreſted by an order from the Empreſs, and ſent under a guard to Moſco.—The Governor-General, Jakobi, called to St. Peterſburg.—The Command arrives at Yakutſk.—Some particulars reſpecting Lachoff's Travels to the Icy Sea, 1770-3.—Chvoinoff's Journey thither in 1775.—The Command arrives at Ochotſk, but returns immediately to winter at Yakutſk.

At Yakutſk we found, to our great ſurpriſe, Mr. Ledyard, an old companion of Captain Billings, in Cook's voyage round the world; he then ſerved in the capacity of a corporal, but now called himſelf an American colonel, and wiſhed to croſs over to the American Continent with our Expedition, for the purpoſe of exploring it on foot.

Captain-Lieutenant Bering, who had been ſent the 12th of February laſt from the Kovima, to ſuperintend the forwarding the neceſſaries for the Expedition to Ochotſk, was alſo here. He had forwarded many articles during the ſummer, and ſent ſome of the anchors and heavy baggage to the river Mayo, to be tranſported to Yudomſki Kreſt by the water communication. The guns, medicines, ſailors' clothing, &c. weighing upwards of 100 tons, ſtill remained at Irkutſk, where they had lain ever ſince laſt winter.

Captain Billings reſolved to go himſelf to Irkutſk to ſee theſe articles forwarded down the Lena ſo ſoon as the river ſhould open in

the ſpring. Accordingly, on the 29th December, he ſet out with carriages on ſledges, which we had made on purpoſe. Mr. Ledyard, Robeck, Leman, his firſt mate, and I, accompanied him; the Ruſſian ſecretary and ſeveral neceſſary hands were ordered to follow with all poſſible ſpeed.

We arrived the 16th January 1788, and I took up my abode with my friend Brigadier Troepolſki.

The Captain began making preparation for tranſporting the guns, &c. and ſent to build veſſels on the Lena at Katſhuga, where they were depoſited.

In the evening of the 24th February, while I was playing at cards with the Brigadier and ſome company of his, a ſecretary belonging to one of the courts of juſtice came in, and told us, with great concern, that the Governor-General had received poſitive orders from the Empreſs, immediately to ſend one of the Expedition, an Engliſhman, under guard to the private inquiſition at Moſco; but that he did not know the name of the perſon, and that Captain Billings was with a private party at the Governor-General's. Now, as Ledyard and I were the only Engliſhmen here, I could not help ſmiling at the news, when two huſſars came into the room, and told me that the Commandant wiſhed to ſee me immediately. The conſternation into which the viſitors were thrown is not to be deſcribed. I aſſured them that it muſt be a miſtake, and went with the guards to the Commandant. Here I found Mr. Ledyard under arreſt. He told me, that he had ſent for Captain Billings, but he would not come to him. He then began to explain his ſituation, and ſaid that he was taken up as a French ſpy, whereas Captain Billings could prove the contrary;

trary; but he ſuppoſed that he knew nothing of the matter, and requeſted that I would inform him. I did ſo; but the Captain aſſured me that it was an abſolute order from the Empreſs, and he could not help him. He, however, ſent him a few rubles, and gave him a peliſſe; and I procured him his linen quite wet from the waſh-tub. Ledyard took a friendly leave of me, deſired his remembrance to his friends, and with aſtoniſhing compoſure leaped into the kibitka, and drove off, with two guards, one on each ſide. I wiſhed to travel with him a little way, but was not permitted. I therefore returned to my company, and explained the matter to them; but, though this eaſed their minds with regard to my fate, it did not reſtore their harmony. Ledyard's behaviour, however, had been haughty, and not at all condeſcending, which certainly made him enemies.

I found a conſiderable alteration in this city; it, indeed, ſtill continued the ſame hoſpitable and agreeable place for a viſitor, but the harmony of the inhabitants was not ſo complete. Not to tire my readers with particulars, I ſhall only acquaint them, that there now exiſted a difference of opinion in the town, which led to the formation of two parties. However, at the latter end of March, the Governor-General, Jakobi, a good and worthy man, who had been particularly kind to our Expedition, was called to St. Peterſburg. The heads of one party accompanied him, and harmony was again reſtored.

We remained here, enjoying excellent company and good living, with every rational entertainment, till the 10th of May, when we took our departure for Katſhuga.

Thirteen veſſels were nearly ready for tranſporting our guns, medicines, glaſs, ſailors' clothing, and our own ſtores; and on the 15th, nine veſſels being completely loaded, I received the charge of their conveyance to Yakutſk. The crews conſiſted of 50 exiles of the worſt claſs, and ſix ſoldiers. On the very firſt day, I was under the neceſſity of inflicting puniſhment on one of them for a theft, and forbade all perſons from leaving their veſſel, appointing at the ſame time a ſoldier to go on ſhore for them every morning to make purchaſes of proviſions for the day, and allowed each man a daily portion of brandy out of my own private ſtock. Whether this had any effect upon them as an indulgence, or that my determined manner of proceeding, and the ſeverity of the puniſhment that I inflicted, more prevailed, I cannot tell; but I never ſaw people more active, attentive, and obedient, than they were all the reſt of the way.

I arrived ſafely on the 4th of June at Yakutſk, and immediately croſſed over with all the veſſels to the oppoſite plains. On the 6th, I diſpatched 150 horſes, properly loaden, for Ochotſk, under the charge of ſome ſoldiers. Horſes were kept in readineſs by Captain Saretſheff and Mr. Bakoff. The former gentleman took charge of the guns and all heavy materials, and conveyed them acroſs the country about 300 verſts to the river Mayo, where he had prepared veſſels for their conveyance againſt the ſtream of that river and the Yudoma. On the 8th, Captain Billings arrived with the remainder of the articles, the greater part of which were ſtill unpacked, particularly cloth, yarns, &c.

By the 15th of July, every article was forwarded, and all our hands, except a few attendants, and our naturaliſt, Dr. Merck, who went

early in the ſpring to the neighbourhood of the Viluye, or Vilui, to obſerve and collect the productions of thoſe parts, from which excurſion he did not return till the beginning of Auguſt.

During my ſtay in Yakutſk, I made it my particular buſineſs to get acquainted with Lachoff and his companions, with a view of obtaining ſome information concerning his travels to the Icy Sea. Lachoff was old and infirm, and recommended me, for any intelligence that I required, to one of his companions, Zaitai Protodiakonoff, now a burgher and ſhopkeeper in this town.

Protodiakonoff accompanied Lachoff in 1770 from his winter buildings at the eſtuary of the Yana, in the month of March, to Swatoi Noſs, the northern promontory of a bay which receives this river.

They ſaw an immenſe herd of deer going to the ſouth, and obſerved that their traces were from the north acroſs the Icy Sea. Lachoff reſolved, if poſſible, to find out whence they came, and in the beginning of April ſet out very early in the morning, with his nart drawn by dogs. Towards evening he arrived at an iſland, 70 verſts from the promontory, in a due north direction, where he paſſed the night, and the next day proceeded farther, the traces of the deer ſerving as a guide. About noon he arrived at a ſecond iſland, 20 verſts diſtant, and in the ſame direction. The traces coming ſtill farther from the north, he continued his route. At a ſmall diſtance from the ſecond iſland, he found the ice ſo rugged and mountainous, as to prevent his proceeding with dogs. He obſerved no land; and therefore, after paſſing the night on the ice, he returned, and with great difficulty, for want of proviſions for his dogs, regained Swatoi Noſs. He repreſented his

diſcovery

diſcovery to the Chancery of Yakutſk, and the intelligence was forwarded to St. Peterſburg. The Empreſs Catherine II. called the iſlands by the name of the diſcoverer, and gave him the excluſive right of collecting ivory and hunting animals in this place, and in any other that he might thereafter diſcover.

In 1773, he went with five workmen in a boat to the iſlands, and continued acroſs ſtraits, where he found the ſea very ſalt, and a current ſetting to the weſt. He ſoon ſaw land to the north, the weather being pretty clear, and arrived on what he called the third iſland. The ſhore was covered with drift wood. The land was very mountainous, and ſeemingly of great extent; but no wood was ſeen growing, nor did he obſerve the traces of any human being. He found ſome tuſks of the mammont, ſaw the tracks of animals, and returned (without making any other diſcovery) to the firſt iſland, where Lachoff built a hut of the drift wood, and paſſed the winter. One of his companions left a kettle and a palma on the third iſland.

This was reckoned a diſcovery of ſome importance, and the land-ſurveyor Chvoinoff received orders from the Chancery of Yakutſk to accompany Lachoff to this fartheſt land, and take an exact ſurvey of the ſame. In 1775, on the 9th February, he left Yakutſk, arrived on the 26th March at Uſt Yanſk Zemovia, or winter huts, at the eſtuary of the Yana. He immediately proceeded acroſs the bay to Swatoi Noſs, which is 400 verſts from the diſcharge of the river, in a direction north north-eaſt. On the 6th May he arrived at the firſt iſland, which is 150 verſts long, and 80 verſts broad, on the wideſt part, and 20 verſts on the narroweſt. In the middle is a lake of conſiderable extent, but very ſhallow, and the borders of which are ſteep. The whole iſland,

except

except three or four inconſiderable rocky mountains, is compoſed of ice and ſand; and, as the ſhores fall, from the heat of the ſun's thawing them, the tuſks and bones of the mammont are found in great abundance. To uſe Chvoinoff's own expreſſion, the iſland is formed of the bones of this extraordinary animal, mixed with the horns and heads of the buffalo, or ſomething like it, and ſome horns of the rhinoceros; now and then, but very rarely, they find a thin bone, very ſtraight, of conſiderable length, and formed like a ſcrew.

The ſecond iſland is 20 verſts diſtant from this; low, and without drift wood; 50 verſts in length, and from 20 to 30 verſts broad. Here alſo the tuſks and other bones are found; and great numbers of the arctic foxes are to be met with on both. The ſurface is a bed of moſs of conſiderable thickneſs, producing a few low plants and flowers, ſuch as grow about the borders of the Icy Sea. This moſs may be ſtripped off as you would take a carpet from a floor, and the earth underneath appears like clear ice, and never thaws: theſe ſpots are called Kaltuſæ.

The ſtraights to the third iſland are 100 verſts acroſs. He travelled along the ſhore; and on the 21ſt May diſcovered a very conſiderable river, near which he found the kettle, palma, and ſome cut wood, in the ſame place and ſituation as they had been left by Lachoff's companions three years before Chvoinoff's arrival. This river he called Tzarevaia Reka, in conſequence of having diſcovered it on the 21ſt of May. The ſhores were covered with drift wood, all of it extremely ſhattered. Aſcending to the top of a very lofty mountain, he ſaw a mountainous land as far as his eye could trace in clear weather, extending eaſt, weſt, and north. Continuing his route along the coaſt 100 verſts, he

obſerved three rivers, each of which brought down a great quantity of wood, and abounded in fiſh; and here the nerk, a ſpecies of ſalmon frequenting Ochotſk and Kamtſhatka, was in abundance, though not found in the Kovima or Indigirka. On this land he paſſed the ſummer, and returned in the autumn to Swatoi Noſs.

I aſked, whether he obſerved any regular ebb or flow of the tide? He ſaid, that "he did not obſerve any remarkable alteration." Whether he recollected how the current ſet? "He believed to the weſt." Whether the water was ſalt? "Yes, and very bitter." He further obſerved, that there were whales and belluga, white bears, wolves, and rein-deer. No growing wood was to be ſeen, and the mountains were bare ſtone. None of theſe travellers took any notice of the depth of the water, nor were they acquainted with the nature of tides.

This was the total ſum of intelligence that I was able to obtain concerning this land; and I am told, that ſince Chvoinoff no traveller has paid a viſit to it. Perhaps the three rivers obſerved are only ſo many diſcharges running from one that is very conſiderable.

On the 11th of Auguſt we again ſet out from Yakutſk for Ochotſk, accompanied by the Captain of the diſtrict, to examine into the ſtate of numerous articles that had been ſcattered on the road, owing to the loſs of horſes. On the 23d we croſſed the White River, without the leaſt difficulty, and arrived on the 31ſt at Yudomſky Kreſt; where we found our guns and heavy baggage all ſafely arrived, and were informed that Mr. Saretſheff had ſet out for Ochotſk four days before. I believe this to be

the

the firſt inſtance of baggage of any kind having been tranſported from Irkutſk to this place in one ſeaſon by the water conveyance.

We arrived at Ochotſk the 6th of September, and found every thing going on in the beſt order with ſpirit and alacrity. Obſerving, however, that our ſhips could not be ready for ſea before next July, Captain Billings reſolved upon returning to Yakutſk to paſs the winter. Captain Saretſheff propoſed ſurveying the coaſt of the ſea of Ochotſk, as far as the Chineſe frontiers, in an open boat; and Captain Billings promiſed to meet him in the enſuing month of June at the diſcharge of the Aldima, to which place he purpoſed going by land and water, with Tungooſe guides from Yakutſk. Matters being thus ſettled, on the 12th September Captain Billings, Mr. Robeck, and I, again expoſed ourſelves to the dangers and difficulties of a journey on horſeback of 1200 verſts at ſo late a ſeaſon of the year. We got into ſevere winter at Yudomſky Kreſt on Wedneſday the 20th September. The next morning we had 20° below the freezing point of Reaumur, and the river was full of drifting ice; notwithſtanding which, Captain Billings attempted to go by water to Uſt Mayo; but the ſecond day we were frozen up, and obliged to return on foot to the Kreſt. We obtained horſes, and proceeded on the 27th September; but the ſeverity of the weather and bad roads prevented our reaching Yakutſk till the beginning of November 1788.

I now obſerved, that the officers of government at Yakutſk were ſuddenly become wealthy; that ſome, who with difficulty procured the common neceſſaries of life on our firſt arrival in this town two years ago, were now enabled to keep a carriage, with every thing ſuitable to that ſtyle of living; and, upon the ſtricteſt

inquiry, I found, that theſe gentlemen were the volunteers who were ſo active in procuring horſes for the uſe of the Expedition.

During the winter, I employed myſelf in procuring the beſt intelligence that I could obtain, in addition to what I already knew, concerning the Yakuti; and the reſult I ſhall communicate in the following Chapter.

CHAP.

CHAP. X.

Account of the Yakuti, collected from perſonal inquiry and reſearch.

THE nation known among the Ruſſians by the name of Yakuti call themſelves Socha, and ſay that they came originally from the ſouth. A nation of Mongals inhabit the diſtrict of Kraſnoyarſk, extending to China, who alſo call themſelves Socha, and ſpeak the ſame language as the Yakuti. Theſe relate the following ſtory of their migration.

The Toyon (i. e. Chief) Omogai Bey, with all his tribe and cattle, left the fertile plains ſituated to the weſt of the lake Baical, or Baighal, to make way for a more powerful horde; retreating to the graſſy meadows between Irkutſk and the river Lena, now known by the name of the Buratſki Step. Here he reſided ſome years, probably at continual ſtrife with the Burati; for he was compelled to fly from their fury, availing himſelf of the decreaſing moon, at which time the Burati never attack their enemies. Omogai croſſed the Lena, at a ſpot between where Katſhuga and Vercholenſk now ſtands. He kept cloſe to the river, making reſting-places where he found paſture for his cattle, until he arrived at the eſtuary of the Olekma. In this neighbourhood are meadows affording plenty of graſs, the rivers are abundantly ſtored with fiſh, and the woods replete with wild beaſts. He might, indeed, have found places equally eligible before he came ſo far to the north; but theſe were the reſort of the Tungooſe, and he would have expoſed himſelf to their depreda-

tions; for the Aſiatic tribes, as well as thoſe of America, were inveterate enemies to each other, and ſkirmiſhes were the ſure conſequences of meeting in their hunting parties: even now theſe frequently happen. While Omogai was in this ſituation, two of his hunters fell in with a man of their own race, who was called Aley, or Eley, and had made his eſcape from the Burati. They took him to Omogai's who employed him as his labourer. His remarkable ſtrength, ſkill, and activity, ſoon recommended him to Omogais' particular notice, and he was entruſted with the management of ſome excurſions. The aſtoniſhing ſucceſs that attended all his enterpriſes, induced Omogai to make him overſeer of all his tribe and effects, which latter were conſiderably increaſed by the prudence of Aley's management; and, in conſequence of this increaſe, the chief was obliged to extend his poſſeſſions to the vicinity of the preſent town of Yakutſk and the oppoſite plains.

Omogai, who had a daughter by his wife then living, and a young woman whom he had adopted, was old, jealous, and dreaded the effects of Aley's power. He obſerved, that all his tribe eſteemed Aley to adoration; for they ſuppoſed him to poſſeſs ſupernatural powers, and attributed his continual good fortune and ſucceſs to the immediate influence of ſpirits. This made him uneaſy; and, with a view of ſecuring his poſſeſſions and his name, he offered Aley his daughter in marriage. Aley now avowed himſelf a Shaman, and aſſumed the powers of divination. He told Omogai, that his daughter would never have children, and therefore he would not take her; but demanded the young woman that the chief had adopted, with whom he ſhould have a numerous family. The mother violently oppoſed this union, but Omogai at length conſented. Aley's life was ſoon rendered very unpleaſant by the perſecution of the mother and daughter;

daughter; but, having received very liberal preſents from Omogai at the time of obtaining the elderſhip of the tribe, and as rewards for his careful management not only of cattle and horſes, but alſo of men and women labourers, he was in poſſeſſion of independent wealth; and therefore retired, with Omogai's conſent, two days' journey from his habitation, and eſtabliſhed himſelf on the plains 18 verſts north-weſt of the preſent town of Yakutſk, by the ſide of a branch of the river Lena, now dry. Here he remained till the death of his benefactor, when the greateſt part of the tribe came over to him. Aley, who was now become extremely powerful, is reported to have had 12 ſons and ſeveral daughters (Ghanghalas, or Chanhallas), the eldeſt of whom was the founder of the Ghanghalaſki tribe. The remaining hiſtory of Omogai's wife and daughter I have not been able to learn; but the tribe is now known by the name of Batulinſk. It is ſaid to be about 300 years ſince Omogai migrated hither.

The Batulinſki tribe was afterwards increaſed by a number of the Chorintſi Burats; but the time of their union is unknown. I am inclined to think that their language was different; for if a Yakut be not immediately underſtood by his brethren, he expreſſes his diſlike to repeat the ſentence, by ſaying, "I ſpoke not with the tongue of a Chorintſi." They know not whence they obtained the name of Yakut, but call themſelves Socha in the plural, and Sochalar in the ſingular; I attribute the name to the founder of the town of Yakutſk, or to the name of the diſcoverer of theſe people; for Yakutoff is no uncommon name among the Coſſacs in the government of Irkutſk.

The firſt intelligence that Ruſſia obtained of theſe people was in 1620, when they were diſcovered by the Coſſacs that inhabited

bited the Mangazey. At that time they were divided into many tribes; and the diſſenſions that exiſted among them contributed to their being ſubdued.

Millach is the firſt chief reported to have gone over to the Ruſſians. He had a ſmall tribe, which ſeparated from the Ghanghalaſki, under the charge of the chief Tygin. Millach inhabited a hill on the eaſtern ſhores of the Lena, 60 verſts below Yakutſk, called Tſhebedal. He ſupplied the Ruſſians with food, and gave them 40 archers to ſubdue Tygin and his tribe, which was accompliſhed on Tygin's falling in the field. Tribute was collected in 1630, and in 1632 the firſt oſtrog was built among them on the mountain Tſhebedal, but afterwards removed to the place where the town now ſtands. Millach's tribe is now known by the name of Namſki Ulus, or Our Tribe, a name given to it by the Ruſſians.

Their number is computed at Yakutſk to be 50,000 males; but I am inclined to think that they are not ſo numerous; and my reaſons are theſe: They ſay themſelves, that in 1780 they were more numerous than they are now, much better circumſtanced, and in an increaſing ſtate. At that time they had only one Commander and his Aſſiſtant *. Upon the Socha chiefs bringing their annual tribute, they always obſerved the cuſtom of ſhewing their particular attachment, by making theſe gentlemen a

* I am here induced to remark, that before the Empreſs Catherine II. eſtabliſhed governments and courts of juſtice throughout the empire (1782), all theſe diſtant towns and diſtricts were governed by a voyavod and his ſecretary, and Coſſacs were ſent among the tributary tribes to enforce the imperial mandates. On the eſtabliſhment of the government, every town had its mayor and different courts of juſtice allowed; ſo that there now exiſt many towns in theſe remote parts, where the inhabitants conſiſt of government people only.

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trifling preſent of furs, horſes, and cattle, and ſupplying their table with fleſh, fiſh, milk, and butter, and alſo with wild fowl. Conſidering their immenſe poſſeſſions, and the cheapneſs of all the articles, theſe preſents were never felt as of any conſequence by the individuals who made them. At preſent, however, their ſtock is conſiderably diminiſhed, not amounting to one tenth part of what it was. Inſtead of having only the voyavod and his ſecretary to deal with, they now know not how many commanders they have to pay their reſpects to. A commandant, a captain of the diſtrict, a director of economy, judges of the different courts of juſtice, with their ſecretaries and dependants, and other officers, are occaſional travellers among them; beſide which, they complain of numberleſs exactions according to the arbitrary will of their ſuperiors, only authoriſed by their own preſumption.

Theſe circumſtances undoubtedly diſcourage the activity of the Yakut, who no longer endeavours to procure wealth, becauſe it is the likelieſt means of making him the object of perſecution. Thus property, tranquillity, and population decreaſe. The princes or chiefs dwelling near towns acquire their luxuries, and oppreſs their dependant tribes to procure wine and brandy in addition to their koumis: this was never known among them till the year 1785. I will farther add, that in 1784 the diſtrict of Giganſk produced 4834 tributary natives; but in 1789 their number amounted only to 1938. Mr. Bonnar, the captain of the diſtrict of Zaſhiverſk, told me, that the tributary nations in his circle amounted to only half the number that they were five years ago and that theſe were very poor indeed. To my certain knowledge, upwards of 1500 Yakuti are hired as labourers by the inhabitants of the town of Yakutſk; their wives dwell with the tribes, and do not ſee their huſbands for years. However, I have ſome other

reaſons, which will be mentioned hereafter, to account for the decreaſe in the population of this nation.

Of the firſt huts about the river Newya, near Olekma, and all along the river Lena to its eſtuary, the inhabitants are in indigent circumſtances; as are alſo thoſe of the Ochot, Amicon, Momo, Indigirka, Alaſey, Kovima, and Jana, who ſelect ſuch plains as afford food for their cattle; while the mountains are the places of reſort of the Tungooſe. The Yakuti that inhabit the Vilui, Aldan, Ud, and all the intervening plains, are immenſely rich in cattle.

There is perhaps no nation in the world that can exhibit a greater variety with regard to ſize. The affluent, whoſe dwellings are ſituated about the meadows on the ſouth ſide of the Virchoyanſki chain, are from five feet ten inches to ſix feet four inches high, well proportioned, extremely ſtrong, and very active; while the indigent inhabitants of the more northern parts are in general below the middle ſize, indolent, and of an unhealthy complexion, evidently ſtunted by the badneſs of their food, the ſeverity of the climate, and the want of proper cloathing. Their wealth conſiſts in horſes and horned cattle. The private property of no individual at this inſtant exceeds 2000, all ſpecies included; formerly, numbers of them poſſeſſed 20,000, according to their own teſtimony, and that of the old Coſſac before mentioned.

With regard to their capacity of ſupporting themſelves, they are independent. Their only neceſſaries are, a knife, hatchet (or palma), flint and ſteel, and a kettle; and with theſe articles the all-providing hand of God ſufficiently ſupplies them, and capacitates them to furniſh the other tribes. From the iron ore of the Vilui

Vilui they make their own knives, hatchets, &c. and of ſuch temperature as baffles the more enlightened art of the Ruſſians. This ore may be called native iron, from the little trouble they have in preparing it. Every utenſil and article of dreſs they make themſelves.

In their roving parties, on the chaſe or travelling, they only take with them a ſcanty ſupply of koumis, depending on chance for the reſt; and ſhould their purſuits prove unfortunate, they find their food in the inner bark of the pines and birch-trees, or the different edible roots. Squirrels are very good eating, but their favourite food is the whiſtling marmot.

RELIGION.

The Socha regard themſelves as in a perfect ſtate of demonocracy. In general converſation, they call God, Tanghra; a church, Tanghra Dſhi, God's houſe; and Sundays, Tanghra Kuin, God's day. I could not obtain any explanation of the attributes of Tanghra. Thoſe of other gods they explain as follows:

Aar Toyon (the merciful chief): To him they attribute the creation, and ſuppoſe him to have a wife, whom they call Kubey Chatoon (ſhining in glory): they are both all-mighty.—Another god, named Wechſyt (the advocate), carries up their prayers, and executes the reſolutions of the godhead: Wechſyt, they ſay, uſed frequently to appear among them, and ſtill continues now and then to ſhew himſelf, aſſuming the form of a white ſtallion, or different birds, from the eagle to the cuckoo.—Sheſſugai Toyon (the protector): he intercedes for them, and procures all deſirable things, as children, cattle, riches, as well as all good and com-

fortable things: his wife they call Akſyt (the giver).—Theſe are their benevolent gods; and I may add to the number a being which they adore in the ſun: to theſe they offer ſacrifices only once a year. They attribute a particular being to the fire, and conſtantly offer ſacrifices, ſuppoſing him equally poſſeſſed of the powers of good and evil.—Their malevolent ſpirits are very numerous; for they have no leſs than 27 tribes or companies of aërial ſpirits: their chief they call Ooloo Toyon: he has a wife and many children: Sugai Toyon (the god of thunder) is his miniſter of immediate vengeance (Sugai is hatchet): the reſt they diſtinguiſh by the names of different colours. Cattle and horſes are ſacred to the different ſpirits whoſe colours they bear. They alſo reckon eight tribes of ſpirits inhabiting Mung Taar (everlaſting miſery). Their chief is called Aſharay Bioho (the mighty): theſe have wives, and the cattle ſacred to them are quite black: their departed ſhamans are ſuppoſed to unite to theſe. They are in great dread of another evil goddeſs, whom they call Enachſys (cowherdeſs): ſhe damages the cows, inflicts diſorders on them, deſtroys calves, &c. and is frequently honoured with offerings to be propitious to their ſtock.

CEREMONIES.

Their holidays commence with the month of June, and laſt about 15 days. The mares having caſt, a ſhort time is allowed the colts to ſuck, that they may acquire ſtrength; they are then tied up, or pent in coops about the hut, to prevent their ſucking at will; which is only allowed twice a day, when the mares are milked. The milk is collected in ſymirs, or large leather buckets formed like a bottle, wide at bottom, and narrow at the top, each

containing about an anker; into this a ſmall piece of the ſtomach of a calf or colt is thrown, and ſome water mixed with it. It is then kept in conſtant agitation by a broad-ended ſtick, until it ferments, and acquires an agreeable acidity, which is very nouriſhing; and if taken in great quantities, it has an intoxicating quality. Of this drink, which they call koumis, every one collects as much as he can; and ſome of the chiefs obtain more than 500 ankers of it. A day is then fixed upon by each chief to conſecrate his ſtock, which is performed as follows:

A ſummer hut is built of thin poles of a conical form, covered with the inner bark of birch, on ſome extenſive meadow. It is ornamented inſide and out with branches of the birch-tree, and a hearth is made in the centre. Relations and acquaintances are invited to the banquet; but all gueſts are welcome of every nation indiſcriminately. The magicians take the head ſeats; others are ſeated according to the eſtimation of their ſeniority *.

When the hut is full, the elder ſhaman riſes, and commands one of the Socha that he knows to be qualified (namely, that has not ſeen a corpſe within the month, and that has never been accuſed of theft, or bearing falſe witneſs againſt any body, which defiles them for ever, and renders them unqualified for this ſacred and ſolemn taſk) to take a large goblet, called a tſhoron, which is uſed to drink out of on ſolemn occaſions, and fill it with koumis out of the firſt ſymir; then to place himſelf before the hearth, with his face to the eaſt, holding the tſhoron to his breaſt about

* Years do not ſecure the title of ſenior, (Oghonior,) which is the greateſt term of reſpect that the Socha know. Magicians have it, and all ſuch as are capable of adviſing the proper means to be adopted to ſecure ſucceſs to ſuch public and private concerns as are virtuous and good.

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two minutes. He then pours koumis three times on the hot embers, as an offering to Aar Toyon. Turning a very little to the right, he pours three times to Kubey Chatoon; then to the ſouth he offers in the ſame manner to each of the benevolent gods. With his face to the weſt, he pours three times to the 27 tribes of aërial ſpirits; and three times to the north to the eight tribes of the pit, and to the manes of their departed ſorcerers. After a ſhort pauſe, he concludes his libation by an offering to Enachſys the cowherdeſs. The ſorcerer then turns the man with his face to the eaſt, and commences a prayer aloud, thanking the godhead for all favours received, and ſoliciting a continuance of their bounty. On concluding his prayer, he takes off his cap, with which he fans himſelf three times, and cries out aloud, "Oorui!" (grant) which is repeated by all preſent. The elder ſhaman then, taking the tſhoron, drinks a little, and hands it to his brethren of the ſame order; from whom it paſſes to the company as they ſit, except ſuch as are defiled. Women are not admitted into the hut; nor are they, or the diſqualified, allowed any of the koumis out of the firſt ſymir, which they call ſanctified, as poſſeſſing the power of purifying and ſtrengthening in a divine ſenſe.

They all now go out of the hut, and ſeat themſelves on the ſtrewed branches of birch, in half circles fronting the eaſt. All the ſymirs are carried out, and placed between the branches of trees ſtuck in the earth, and they commence drinking; every creſcent having their ſymirs, tſhoron, and preſiding ſhaman, who fills the goblet, and puſhes it about with the courſe of the ſun. The quantity that they drink is incredible. Tournaments now begin, wreſtling, running, leaping, &c.; and if any one carry off the prize in all the achievements, he is eſteemed as particularly favoured by the deities, and receives more reſpect and credit

credit in his teſtimony than falls to the lot of a common man. When the ceremony is finiſhed, they mount their horſes, forming half circles, drink a parting draught, and, wheeling round with the ſun's courſe, ride home. Women attend, and form parties among themſelves at ſome diſtance from the men, where they drink, dance, &c.

MAGICIANS, OR SHAMANS.

Men and women are both admitted to this order; but very few of the latter, as particular circumſtances attending their birth or infancy can alone authoriſe their inauguration. Young men are inſtructed by an old profeſſor, who accompanies them by day and night to the moſt ſolitary parts of the woods; ſhews them the favourite ſpots of the ſpirits of the air, and of the pit; and teaches them to cite their appearance, and claim their influence. I have heard moſt wonderful relations of their power, even from the Ruſſians; but, notwithſtanding I have ſeen their enchantments or incantations many times, I never could diſcover any of their feats equal to that of a common conjurer in England. The following is an account of their performance:

When a ſick Socha ſends for a ſhaman to appeaſe the wrath of the evil ſpirits that torment him, the ſorcerer takes a ſwitch, ties a few hairs from the mane of a horſe to the end of it, walks and jumps about the ſick perſon, waves his ſwitch, and conjures the demons to appear and relate the cauſe of their tormenting him, and how they are to be appeaſed.

After ſome time has paſſed in this invocation, he ſtarts, pretends to ſee the ſpirits, and, liſtening to their admonition for ſome time,

time, turns to the patient, and tells him whence the ſpirits came; that it was with a view of deſtroying him, but that they might be induced to accept as a ſacrifice, inſtead of him, a fat mare or a cow, mentioning the particular colour. This is immediately procured; for whoever has one anſwering the deſcription readily gives it.

The offering being procured, the ſhaman dreſſes himſelf in full form, walks with his ſwitch to the poſſeſſed, embraces him, and commands the demons to leave him; then, riſing in great agitation, he ſuddenly ſprings upon the offering, raving and ſhouting as much as he poſſibly can: the beaſt now ſtarting, and being reſtleſs, is a proof of the pain that it endures from the demon.

The following morning the ſacrifice is led to the place appointed, which is always on a riſing ground at the entrance into a wood. Four poles are driven into the ground, on which they erect a ſtage covered with twigs, whereon the offering is ſlain and ſkinned. The fleſh is dreſſed and eaten on the ſpot; the bones collected, wrapped up in the twigs that were on the ſcaffold, put inſide the ſkin of the animal, and ſtuck at the top of ſome tree on the ſpot: if the ſacrifice was to the aërial ſpirits, the head is directed upwards; if to the ſpirits of the pit, the head is looking downwards. The ſorcerer then, arrayed in his magic robes, takes his tambour, and begins his formal ſpells; beating his tambour, raving, jumping, and uſing an unintelligible jargon in the moſt extravagant manner; his long hair hanging over his face, he conjures the ſpirit of the ſacrifice to its demons, and the demons to their proper place of retirement; ſeems, ſeveral times during his incantations, to faint, during which paroxyſms he receives the inſpired power of prognoſticating the fate of the diſeaſed, and the day either of his reſtoration to health, or of his death. If

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he prove miſtaken, it is not regarded as ariſing from want of ſkill, but the unacceptableneſs of the ſacrifice, which is occaſionally renewed till he dies or recovers.

If a ſhaman acquaints any family that ſome demon is intent on inflicting a puniſhment, offerings are made to avert the evil; not of live beaſts, but the rich ſkins of animals, which are hung up in a conſpicuous part of the hut, and buried with the owner when he dies.

The magician's dreſs is a leather jacket, with ſleeves from the ſhoulder to the elbow; along the outer ſeam, long ſlips of leather are ſewn, as alſo round the bottom, hanging to the ground. The jacket is covered with iron plates, and pieces of iron and braſs hanging, which makes a diſmal noiſe while he is leaping about and beating his tambour. He has alſo a piece of leather, like a long apron, reaching from his chin to his knees, tied before, and ornamented in the ſame manner. His tambour is very large, and alſo ornamented in the edges and croſs bars with iron and braſs; and his ſtick is covered with the ſkin of ſome ſhort-haired animal. He alſo wears, at the commencement of his incantations, a fur cap; but this he throws off almoſt as ſoon as he begins his magic ſpells.

METHOD OF DIVIDING TIME.

The year they call gil, and divide it into four ſeaſons, ſaas (ſpring), ſoyin (ſummer), kuiſan (autumn), and kiſun (winter). A month they call ooi; of theſe they have 12 in the year, of 30 days, adding a ſupplemental moon for the deficiency every ſixth year. Their months are named as follow:

Beſia	Budding month	May
Otti	Hay ditto	June
Otterſhachia	Hay forks ſtacking	July
Tierdinnai	Fourth	Auguſt
Beſſinnai	Fifth	September
Altidnai	Sixth	October
Settinnai	Seventh	November
Okſinnai	Eighth	December
Tochſinnai	Ninth	January
Ollunnai	Tenth	February
Koluntutor	Stallion	March
Buſſuſtur	Thawing	April.

They have no ſpecific name for the ſupplemental month every ſixth year.

They know the time of night by the ſituation of the great bear and the polar ſtar: the former they call araghas ſolus.

Of the approaching ſeaſons they judge by the following phenomenon. If the pleiades, which they call oorgel, appear before the moon when ſeven days old in the month of January, they expect ſpring to commence in the beginning of April; if when nine days old, at the end of April; but if this happens on the tenth day, they expect a late ſpring, and begin to be very ſaving of their fodder. They reckon diſtance by time; and 30 or 40 verſts, according to the goodneſs of the roads, make a day's journey.

PUNISHMENTS, CUSTOMS, SUPERSTITION, &c.

I have not traced any atrocious vices among the Yakuti or Socha. Robberies are ſeldom committed; ſometimes, indeed, they

they loſe cattle; but this I believe to be more the effect of their ſtraying than their being ſtolen, as detection is almoſt certain; for they have an aſtoniſhing memory, and relate all their loſſes at every public meeting, as weddings, &c.; and if any one has in his travels ſeen ſuch a beaſt as is deſcribed, he relates where and when: thus they are traced, and the puniſhment is, not only reſtoration to the party injured, but the thief is compelled to make good all the loſſes of the other Yakuti during the year, whether he has ſtolen the property or not. If an accuſation be laid againſt any by his companion, of having ſtolen and eaten or killed cattle, he muſt either pay for the ſame, receive a flogging (which is very diſgraceful), or take an oath of his innocence; and, ſhould an innocent man be accuſed, he will, in general, rather pay for them than take the ſtipulated oath, which is adminiſtered with the following ceremony:

A magician places his tambour and dreſs before the fire, the embers of which are burning. The accuſed ſtands before it, facing the ſun, and ſays: "May I loſe during my life all that "man holds dear and deſirable, father, mother, wives, children, "relations; all my poſſeſſions and cattle; the light of the ſun, "and then my own life; and may my ſpirit ſink to eternal mi-"ſery (mung taar), if I be guilty of the charge laid againſt me!" The magician throws butter on the hot embers; the man accuſed muſt then ſtep over the tambour and dreſs, advance to the fire, and ſwallow ſome of the exhaling ſmoke from the butter; then, looking to the ſun, ſay, "If I have ſworn falſe, deprive me "of thy light and heat." Some of the tribes cloſe the ceremony by making the accuſed bite the head of a bear; becauſe they allow this beaſt to have more than human wiſdom, and ſuppoſe that ſome bear will kill the aggreſſor.

They are very revengeful of inſults; nay, even entail revenge on their progeny: nor do they ever forget a benefit received; for they not only make reſtitution, but recommend to their offspring the ties of friendſhip and gratitude to their benefactors. They are very obedient to their chiefs and oghoniors, and ſhew their attachment by frequent viſits and preſents. They are extremely hoſpitable and attentive to travellers, eſpecially to ſuch as behave with a degree of good nature, and very inquiſitive and intelligent; for they aſk queſtions freely, and anſwer any without embarraſſment or heſitation. They are anxious to ſecure friendſhip and a good name, and ſeem to ſtudy the diſpoſitions of ſuch as may be of ſervice to them, to whom they are liberal in preſents, and even in flattery. They deliberate in council on all matters of public concern, as the courſe to be taken by each in the chaſe, &c. The oghoniors are ſurrounded by the reſt, and their advice is always taken. I have never ſeen an old man contradicted or oppoſed, but always as implicitly obeyed as a father of a family. A young man ever gives his opinion with the greateſt reſpect and caution; and even when aſked, he ſubmits his ideas to the judgment of the old.

The Yakuti are a healthy and hardy race, bear the extremes of heat and cold to an aſtoniſhing degree, and travel in the ſevereſt froſts on horſeback, frequently ſuffering much from hunger; they are, however, ſubject to rheumatic pains, boils, the itch, and ſore eyes; and great numbers were carried off in 1758 and 1774 by the ſmall-pox and meaſles: the ſhamans are their doctors. They are extremely ſuperſtitious, and almoſt every tribe has its object of veneration, but not of worſhip, as the eagle, the ſwan, the ſtallion, &c. Ravens, crows, and cuckoos, are ominous birds; if theſe perch near their huts, they dread ſome misfortune, which

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is only to be averted by ſhooting the bird. Eagles and large birds of prey are, on the contrary, the foreboders of good. They always take care that the doors of their huts ſhall face the eaſt. The fire-place is nearly in the middle; the back of the chimney towards the door, and a free paſſage quite round it. The ſides of the hut are furniſhed with benches and ſmall cabins, which ſerve for ſleeping places. The bench extends about four feet into the hut, where the inhabitants ſit. The men keep the ſouth ſide, and the women the north. Except the hoſteſs, no woman may give any thing to eat or drink to a male ſtranger before the fire-place, but muſt walk round the chimney to preſent it.

They never waſh any of their eating or drinking utenſils; but, as ſoon as a diſh is emptied, they clean it with the fore and middle finger; for they think it a great ſin to waſh away any part of their food, and apprehend that the conſequence will be a ſcarcity. Their earthen veſſels they keep extremely clean, becauſe they can make them ſo by burning, in which caſe the fire accepts the remains that adhered to the ſides. Before they begin to eat any thing, they throw a ſmall ſpoonful into the fire as an offering of thanks. The rich are eſteemed to be under the protection of the gods; but the poor are rejected as forſaken, and only protected by their relations, or obliged to hire themſelves out to work. Every Yakut bears two names, and is never called by the right, except in caſes of neceſſity; thus they think they evade the ſearch of the evil ſpirits bent on tormenting them. They never mention the dead, except allegorically, and leave the hut to ruins wherein any one has expired, thinking it the habitation of demons.

Travelling

Travelling with Captain Billings to the river Mayo, I obſerved the following offering in the hut of Surtuyea Birdugin, an unchriſtened prince or chief, to Sheſſugai Toyon and his wife Akſyt, for the bleſſing of children, called Ogo Oyetto, the child's neſt. It was a horſe-hair cord tied round the chimney, leading to the ſleeping place of the hoſt and hoſteſs, ornamented with bunches of horſe hair. Two round pieces of the bark of birch, to repreſent ſun and moon, ſuſpended; alſo the repreſentation of a ſtallion and a mare formed out of the bark, and a few wooden dolls dreſſed. The cord was faſtened to the poſt at the head of their bed, where was placed a wicker baſket with moſs and fur at the bottom; and on a little table in the baſket was ſet a very ſmall wooden bowl, containing boiled flour; all of which was placed by a ſhaman with great magic ceremony. The prince has three wives, and was married 15 years without having had any children before this offering was made; but afterwards each of his wives bore their ſhare of children, and he has now ſix ſons and daughters. This account was related to Captain Billings and me in the preſence of Mr. Hornoffky, the captain of the diſtrict of Yakutſk, by the prince himſelf: each wife has her ſeparate dwelling ſome miles diſtant from either of the others; and a ſimilar offering is placed in each of their huts.

At the time of parturition, the huſband is called, and two ſkilful women in his preſence aſſiſt the delivery. If a ſon be born, a fat mare is killed on the third day; all the neighbours are invited to ſupper; the child is rubbed all over with fat, and a name given to it,—the more inſignificant the better, for an elegant name would entice the demons to be continually about it. No ceremony is obſerved if the child be a daughter.

MARRIAGE CEREMONY.

The ceremony of buying a wife is extremely formal and tedious. A young man who wiſhes to marry ſends his friend to aſk the conſent of the bride's father, and what kalym (purchaſe) he demands; that is, how many horſes and cattle, as alſo the quantity of raw meat, horſe fleſh, and beef, that he requires for treats and feaſts: this they call kurim; half of the quantity is always given in preſents to the bridegroom by the bride's father, and is called yrdy. The daughter's inclinations are always conſulted; and, if ſhe does not object, the kalym and kurim are ſtipulated. The bridegroom kills two fat mares, dreſſes the heads whole, and the fleſh in pieces, and goes with three or four friends to the father of the bride. On his arrival at the hut, one of his friends enters and places one of the dreſſed horſes' heads before the fire, and returns to his companions without ſpeaking a word. They then all enter the hut, and, a ſorcerer being placed oppoſite the fire, the bridegroom kneels on one knee with his face towards it, into which butter is thrown; he then lifts up his cap a little, and nods his head three times without bowing his body. The ſorcerer pronounces him the happy man, and propheſies a ſucceſſion of happy years, &c. Then the bridegroom riſes, bows to the father and mother, and takes his ſeat oppoſite the bride's place, but keeps ſilent. The meat is then brought in, and the father of the bride diſtributes it among his own friends, but kills a fat mare to treat his new gueſts. Supper being over, the bridegroom goes to bed; the bride, who has not been preſent, is conducted into the hut and to his bed by ſome old woman, and they ſleep together; ſometimes, however, the bride does not appear at the firſt viſit. In the morning, the friends return home;

but

but the bridegroom remains three or four days. A time is now fixed for the payment of the kalym, either at the new or full moon. The kalym and kurim are then carried, without any ceremony, and delivered in the preſence of many friends, who are feaſted, and the bridegroom remains again three or four days, and fixes a time to receive the bride at his own dwelling, which muſt be new built on purpoſe, and this alſo at the new or full moon. All her relations, male and female, with friends and neighbours, ſometimes more than a hundred, accompany the bride with her father and mother, taking with them eight or ten ſymirs full of melted butter, and the dreſſed meat of three fat mares. They go to the new hut prepared for them; three men are ſent to the bridegroom in his old hut, and the greateſt drinkers are choſen for this purpoſe. On entering, the firſt ſays, "We are "come to ſee your dwelling, and to fix poſts before your door." They then kneel on one knee before the fire. An ayach * is filled with koumis, and handed by two men to the three kneeling, each of whom empties an ayach at three draughts. They then riſe and go out, all the company ſaluting them with one cheer. Three others enter; the firſt with nine ſables, the ſecond with nine foxes, and the third with 27 ermine ſkins: theſe they hang on a peg in the chief corner of the hut, and retire. Then a number of women conduct the bride, her face being covered with ermine ſkins, to the hut; the entrance has a wooden bar placed acroſs it, but of no ſtrength, which the bride breaks with her breaſt, and enters the hut. She is placed before the fire, holding her hands open before her, into which ſeven pieces of ſticks are put; as alſo ſeveral pieces of butter, which ſhe throws into the fire. The ſhaman pronounces a bleſſing; ſhe then riſes, and is again con-

* An urn-ſhaped wooden veſſel with three legs, which contains from two to four gallons.

ducted,

ducted, with her face concealed all the while, to the new hut, where the cover is taken from her face. The bridegroom enters, and feasts his guests two days; then presents all his relations with cattle, over and above the kalim; which is, however, returned, on paying their formal visits, perhaps a year or more afterwards. Polygamy is allowed, and some have six wives; but the first is respected by all the rest; they dwell in separate huts; and in case of bad conduct they are returned home, and the greatest part of the kalim is given back. This, however, very seldom happens: I have not been able to hear of a single instance.

BURIALS.

The corpse is first dressed in the best apparel of the deceased, and stretched out; the arms tied tight round the waist; then inclosed in a strong box, with the knife, flint, steel, and tinder; also some meat and butter, "that the dead may not hunger on the road to the dwelling of souls." A shaman presides; the wives and relations accompany the procession to a certain distance; the favourite riding-horse of the deceased is saddled and accoutred, with hatchet, palma, kettle, &c. and led to the place of interment, as is also a fat mare. Two holes are dug under some tree; then the horse is killed, and buried in one, while the corpse is laid in the other. The mare is killed, dressed, and eaten by the guests; the skin suspended on the tree, under which the body lies with the head to the west. The shaman takes his tambour, and invokes the demons to let the spirits of the departed rest in peace, and finishes the ceremony by filling up the grave. A shaman is buried with the same ceremony, and his tambour with him. If an elder brother die, his wives become the property of the

younger; but if a younger brother die, his wives are free; yet they ſeldom marry again, except they be very poor.

Their dreſs is much more complete than that of the Tungooſe; and the more wealthy among them wear a cloth coat lined and trimmed with fur, with tight and well made pantaloons; but their boots are ill ſhapen. The women dreſs very like the Tungooſe, but are in general not ſo clean or ſprightly.

EMPLOYMENT.

About the 25th of June, at the concluſion of their holidays, they commence their ſummer occupation by collecting a great ſupply of the inner bark of the pine and birch, which they dry on racks in their huts: hay-making and fiſhing then occupy the time till berries are ripe, when they collect an immenſe quantity, and boil to preſerve them. In the beginning of October they kill their winter ſtock of cattle for food, and let it freeze, which preſerves it freſh and good; of courſe they ſave ſo much hay. In October and November they catch fiſh under the ice. Toward the end of the latter month, they go out on the chaſe: for wolves and foxes they place in their tracks poiſoned baits of corroſive ſublimate, which they call ſullima, and alſo of nux vomica (Tſhillebucha); beſides having traps ſet, ſpring bows, &c. They are very expert archers, and have a plentiful ſupply of arrows in their quivers.

The women make all their cloathing, look after the cattle, milk the cows and mares, chop wood, dreſs food, &c.

They have no amuſements beyond feaſting, eating, and drinking. Sometimes, indeed, the women dance, which, however, is only forming a ring, and walking round with the ſun's courſe. Their ſongs are inharmonious, and almoſt all extempore on any object that ſtrikes the imagination.

They dreſs leather for uſe in the following manner: For ſymirs, they take a freſh ſkinned cow's or horſe's hide, and ſteep it in water a few days, when the hair eaſily rubs off. It is then hung up till nearly dry, when they lay it in blood until ſoaked through, and then hang it in a ſmoky place for a conſiderable time: of this they make their buckets and ſoals of boots, &c. as the latter are completely water-proof, and the buckets, or ſymirs, even retain oil. The legs of boots they make of colt's or calf's ſkins, ſcraped and rubbed till they be ſoft, then ſewn, ſteeped in blood, and dried in ſmoke; afterwards blackened with wood-coals and fat ſeveral times, and ſmoked again; they then are water-proof. Elk and deer ſkins are dreſſed with and without the hair on, by being covered with a paſte made of clay, and the undigeſted food from the maw; or with cow-dung hung up till nearly dry, then rubbed and ſcraped till ſoft. They are then either kept of their natural colour, or dyed of a red colour with the bark of alder and aſhes boiled together, or elſe of a yellow colour with the roots of ſorrel. The thread with which they ſew their clothes is made of the ſinews from the legs of the horſe, deer, or elk.

Notwithſtanding the ſtricteſt enquiries, I could not obtain any intelligence of remarkable places, or ſprings, of any kind, except the mountain where Commodore Bering obtained coals in his expedition of 1725, and forged his anchors near the famous mount

Tſhebedal, from whence they were tranſported by water to Yudomſky Kreſt, carried by land to Urak Plotbiſha, and down the Oorak, or Urak river, to the ſea and port of Ochotſk.

The mountain is ſituated on the Yakutſk plains 60 verſts north of the town, on the confines of the Lena; it is called by the Ruſſians Surgutſkoi Kamen. I paid a viſit to it in the beginning of March 1789; and found it the extremity of the ridge that bounds the plains toward the river; it is perpendicular; about 50 fathom high; formed chiefly of iron-ſtone, free-ſtone, and ſtrata of coals, lying horizontally, from one to about three and a half feet thick, and of inconſiderable length; they then break off, and the ſame ſtrata ſeems continued ſometimes five or ſix feet higher or lower. They reſemble petrified trees, the end towards the north being thicker than towards the ſouth; ſome have ſhort branches ſhooting from them of about five or ſix feet in length. About half way up the mountain, there ſeems in one place to be a warm ſpring; for I obſerved a vapour or faint ſmoke aſcend from it, and the ground near it was wet.

On my way thither, I paſſed the night in one of the huts of a Yakut about 10 verſts from the mountain, and obſerved there a ſmall furnace with a pair of hand-bellows fixed, which were double, and gave a conſtant blaſt when worked with both hands. I ſaw ſome ſpecimens of iron ore obtained in the neighbourhood, exactly reſembling that of the Vilui in curious forms and ſhapes. This iron my hoſt worked into knives, palmas, hatchets, &c. without fuſion, bringing it into a very ſoft ſtate by heat, and beating it out. He uſed charcoal for this purpoſe, nor did he know, till I ſhowed him, that the coals, which he called black ſtones, would burn; and he was inclined to think me a ſorcerer for making them

them inflammable. This mountain, however, afforded him grind-ſtones.

Returning homeward, I arrived late at a hut about 18 verſts from town, and reſolved on paſſing the night in it. The land-lord, an old Sochalar, entertained me with an account of his own pedigree; tracing himſelf, in a direct line, from Aley; and aſ-ſured me that this was the neighbourhood to which he retreated from Omogai; of which retreat he gave me the following account:

Aley received numberleſs preſents from Omogai and his de-pendents during his elderſhip; but was obliged to leave all theſe behind him, and was driven from Omogai with only two old mares, on which he and his wife rode; all his poſſeſſions at the time were, the clothes on their backs, a bow and arrows, a hatchet, palma, and two knives, with fire materials. Aley thought this a convenient ſpot; and, halting the ſecond day, built a temporary hut, collected carefully the dung of his mares, and, when the wind blew towards Omogai's habitations, made fires of the dung, the ſmell of which allured the ſtrayed cattle to his dwelling: he then carefully fed and watered them, and drove them back.

Aley now built himſelf a very large hut and ſtorehouſes. Be-fore his hut he ſtuck up poſts, with carved tops, for travellers to tie their horſes to, and made a number of hurdle coops and pens cloſe to his dwelling. The cattle conſtantly returning, with freſh numbers of milch cows and mares, Aley collected immenſe quan-tities of butter, milk, and koumis; and, having been very ſucceſs-ful in the chaſe, he had a great ſupply of the meat of the elk and deer, with game of all kinds. He now purpoſely wandered to the

the places that he knew to be frequented by Omogai's tribe, fell in with ſome of his hunters, and brought them to his dwelling, having previouſly cautioned his wife to keep the ſtrayed cattle far from his habitation. Omogai's people were aſtoniſhed at the elegance of the habitation, and the profuſion of fiſh and fleſh of different animals; but, above all, at the quantities of koumis and butter with which he treated them, knowing that he had no cattle.

Aley told them, that he had been admoniſhed by his ſpirits, or demons, to form the different pens which they ſaw before and round his hut, and to affix the poſts for the horſes of his viſitors; aſſuring him, that his gueſts ſhould be numerous, and his poſſeſſions great. He punctually obeyed the injunction of his demons; and, to his aſtoniſhment, obſerved a white-mouthed ſtallion lead to his pens a number of mares and cows: theſe his wife milked; which being effected, they vaniſhed from his ſight, but returned every night and morning. He kept his gueſts all night; and in the morning ſent them away, with proviſions for the road, and preſents of rich furs for Omogai, his wife, and daughter.

Aley had now ſeveral children, and was very deſirous of obtaining, by fair means if poſſible, the property that he ought to have received from Omogai. Not doubting that the reports of the hunters, and the preſents ſent, would effect a reconciliation between them, and aſtoniſh his whole tribe, Aley reſolved on paying his old maſter a viſit, with additional preſents, and inviting him, with the heads of his tribe and families, to paſs a day or two at his habitation. He was well received, and Omogai promiſed to attend, with his wife, daughter, and friends, at an appointed

pointed time. Aley, on his return, built a very large temporary hut to receive his gueſts. They came and brought with them a conſiderable preſent of cattle. Aley treated them with great ſplendor for three days, received the preſent as ſuch, and claimed with humility the cattle and labourers that had been unjuſtly kept from him, and which were his due, becauſe he had ſerved for them. Omogai acknowledged the demand to be juſt; but by the oppoſition of his wife and daughter was prevented from granting it. They departed with their friends; but Aley, through the influence of his demons, cauſed a violent ſtorm and extreme darkneſs, in which they ſtrayed ſeveral days; at length Omogai, his wife, and daughter, reached home; but the greater part of his friends returned to Aley, and acknowledged him their chief; being much diſguſted at the refuſal that he had received, and perhaps dreading the influence of his ſupernatural powers.

Omogai died ſhortly after, and the greateſt part of his tribe went over with their cattle to Aley; but Batulin, one of his ſtewards, married the daughter, and ſecured the reſt. She never bore him children, however; but Batulin took other wives, and had ſeveral.

Aley had twelve ſons and ſeveral daughters. Changhalas he initiated in his magic art, and he was the founder of the Changalaſki tribe.

This account is general among the Changalaſki, who adore the ſtallion; but the hiſtory, as I have before related it, is credited by the greater number.

To

To give my readers an idea of the population of theſe northern parts of Siberia *, I here note the inhabitants from the latitude of 64 to the extremity of the north coaſt, and from the river Kovima, weſtward to the Anabara.

The diſtrict of Zaſhiverſk comprehends the rivers Kovima, Alaſey, Indigerka, and Yana, and thoſe that flow into them; the tributary nations are,

Yakuti - -	2810
Lamut and Tungooſe -	742
Yukagiri - -	322
Tſhuvantſi and Chatinſy -	37

Tribute received 1788 amounts to rubles 4560 for 3911 males.

The circuit is about 6000 verſts in circumference. The diſtrict of Giganſk, a town north of Yakutſk on the Lena, contains one church, two government houſes, ſeven private ones, and 15 huts. It has a mayor (Gorodnitſhik) and his chancery, a court of the diſtrict (Zemikoi Sud), and a magiſtracy, although the merchants are mere trading pedlars, and only two, I think, in number. Its circuit alſo is about 6000 verſts from the Yana to the Anabara, which divides the governments of Tobolſk and Irkutſk. The tributary nations are,

Yakuti - -	1449
Tungooſe - -	489
	1938

Tribute received in 1788—56 ſables, 262 foxes, and rubles 1169 in money.

The Ruſſians inhabiting both diſtricts, including exiles, &c. do not exceed 750 males.

* All Aſiatic Ruſſia, eaſt of the Uralian or Virchoturian chain, is now called Siberia.

CHAP.

CHAP. XI.

Leave Yakutſk.—Arrive at the Village Amginſkoi.—Uſt Mayo Priſtan.—Arrive at Ochotſk.—Two new Veſſels launched, and named The Glory of Ruſſia, and The Good Intent.—The latter Ship wrecked: a Circumſtance which had been predicted by the ſuperſtitious Inhabitants from an ominous flight of Crows.—A Courier from Peterſburg arrives.—An Iſland diſcovered, and named Jonas's Iſland.—Arrive at the Harbour of St. Peter and St. Paul in Kamtſhatka, where we winter, making only occaſional Excurſions.

THE ice of the river Lena broke up the 17th May, and on the 22d we croſſed to the Yarmank, where horſes were provided for us, and we were attended by the Iſpravink of Yakutſk. The river had overflowed the low country; ſome ice was ſtill floating down the ſtream, and a great number of trees.

We immediately proceeded on our journey to the Aldan, at the diſcharge of the river Mayo. I have already deſcribed the plains between Yakutſk and this river; but on our preſent route we ſtopped at a village called Amginſkoi Sloboda, inhabited by 168 Siberian coloniſts, ſent hither to grow corn, which, however, does not anſwer, except for their own ſupport, and not always that; for in ſome years nothing is produced. The inhabitants get their bread chiefly by trading with the neighbouring tribes in trinkets and brandy. They informed us, that none of the wandering Tungooſe were yet arrived at the Uſt Mayo; and,

upon being conſulted about the road to the Aldama and Ulkan rivers (at the diſcharge of which Captain Billings had promiſed to meet Captain Saretſheff), they gave ſo bad an account of it, that Captain Billings reſolved to give up the thoughts of taking this road. He therefore diſpatched a Coſſac with an order from the Iſpravink to the Yakuti inhabiting the plains, that they ſhould ſend immediately to the Aldan Stanok 16 horſes for our conveyance by the old road to Ochotſk.

On Thurſday the 31ſt of May, we arrived at the Uſt Mayo Priſtan, oppoſite the diſcharge of the Mayo, and immediately ſent a man to the prince of the Tungooſe, who reſides about ten verſts up the Aldan. This is the chief or head of all the Tungooſe, who has a number of Yakuti under his direction. He has ſeveral wives of the Yakut and Tungooſe, is by both thoſe nations much reſpected, and acts as an agent to the Mongal Tartars on the Chineſe frontiers, to the Yakuti, and the Tungooſe. He came to us early in the morning of the 1ſt June, and told us, that the road which Captain Billings purpoſed travelling would be attended with ſome difficulty; that the deputies, or elders, of the wandering tribes were not yet arrived; that he would ſend a letter to Captain Saretſheff, and anſwer for its being delivered in 20 days, if he came near the coaſt about the eſtuaries of the Ulkan or Aldama rivers. In conſequence of this, Captain Billings diſpatched a letter to Mr. Saretſheff, deſiring that he would return immediately to Ochotſk, and meet him there, as he hoped the ſhips would be ready for ſea.

Boats were procured, and on the 4th June we fell down the ſtream of the Aldan, 150 verſts to the Old Aldan ſtage, where we arrived

arrived on the 7th, at ſix o'clock in the evening, having for the laſt eight days had rainy and ſtormy weather.

The ordered horſes were not yet arrived, nor was the Coſſac who was ſent for them; but we obtained twelve ſtage horſes, with which we proceeded to Ochotſk on the 8th at noon, and arrived at the port on the 21ſt. Here we found the largeſt ſhip ready for launching, and the other nearly ſo. All the articles arrived ſafe, and all hands in good health and ſpirits; and toward the end of the month Mr. Saretſheff returned, having received the letter ſent him from Uſt Mayo Priſtan.

Dr. Merck, our naturaliſt, was making a collection of the curioſities about the Mariakan mountains; but orders were diſpatched for his return, as we expected to get to ſea about the middle of Auguſt.

Toward the middle of July, our largeſt ſhip was launched; ſhe went off the ſtocks extremely well; but, owing to the ſhoals in the river, it was almoſt three weeks before we could get her into deep water near the diſcharge of the bay, where ſhe took in a part of her cargo. She was then taken out to ſea about five miles, over the ſand banks, and brought to anchor in ſix fathom water, with a bottom of ſand and ſtones. We employed the tranſport galliots to carry guns, ſtores, &c. on board while in this ſituation; for ſhe could not have paſſed the ſhallows even in proper ballaſt. She was named, by order of the Empreſs, the Slava Roſſie, Glory of Ruſſia.

On the 8th Auguſt, the ſecond ſhip was launched, and called the Dobroia Namerenia, Good Intent. She was rigged, and ready

to go out early in September; it was, however, neceſſary to wait for the ſpring tides to carry her over the grounds; a galliot was loaden with her ſtores and ammunition, and got ready to accompany her out.

In the evening of the 7th of September, Captain Billings reſolved on carrying the ſhip out the next morning; Mr. Loftſoff, the pilot of the port, was ordered to take the charge, and get all the boats belonging to the port manned, and in readineſs, that, in caſe the wind ſhould fail, they might tow her out; the boats of both ſhips were alſo ordered to attend. Captain Hall, who had the command of this ſhip, ſlept on board. At ſix o'clock in the morning of the 8th, I went on board to get a book out of the cabin. Before I got up the ſide of the ſhip, the Captain aſked me whether I brought any orders to go out. I told him that I did not, and aſked him if he thought it was poſſible. The wind was favourable, but very ſcant; a heavy ſwell from the ſouth-weſt right on ſhore, and the ſea breaking amazingly over the banks, and on the beach: this I thought indicated a ſouth-weſt breeze, beſide which, it was very foggy. Captain Hall ſaid, he thought it impoſſible, and certainly ſhould not go out, unleſs the commander came on board himſelf, and inſiſted upon it. Mr. Koch, the acting commandant, who was on board the tranſport veſſel cloſe aſtern, aſked Captain Hall, if he ſhould follow him? The anſwer was, "No, unleſs you mean to be caſt aſhore; but I ſhall not go myſelf if I can help it." At half paſt ſeven Captain Billings came on board, and, after ſome converſation with Mr. Hall, ſaid, "The pilot ſhall determine." The pilot arrived; Mr. Hall repreſented his fears; and added, that Mr. Loftſoff was, perhaps, not aware of the difference between the ſhip that he was then taking charge of, and a galliot of ſixty tons. Captain Billings

lings ſaid, he did not think the danger ſo great as Captain Hall repreſented; and urged the neceſſity of getting out this ſpring-tide if poſſible, owing to the late ſeaſon, and his deſire of paſſing the winter on the north-weſt coaſt of America. The pilot affirmed that there was not any danger. Captain Hall then told the crew to obey every order of Mr. Loſtſoff, and refuſed to have any charge in carrying the ſhip out, but proffered every aſſiſtance in his power. At eight o'clock, high water, juſt as the tide was turning, tow-lines being given to ſix barges and boats, ſhe caſt off; it was a perfect calm; the ſwell very heavy; and the ſea breaking over the banks with great violence. The boats towed her through the paſſage, keeping her head againſt the ſwell; but when the firſt boat (the largeſt, which had, I believe, ſixteen oars), got into the breakers, ſhe ſhipped a heavy ſea, and caſt off her tow-line *. The ſhip pitched exceedingly, and the ſkiff along ſide had her head carried under water, being entangled with the fore-chains, and two men were waſhed out of her. Every boat now caſt off her tow-line to ſave the men, one of whom only they picked up. The ſhip, driven at the mercy of the ſwell, ſtruck on the beach, and ſtuck faſt. At a quarter paſt nine, a light breeze ſprung up from the ſouth-weſt. Her maſts were cut away, but to no purpoſe; for the tide was on the ebb, and ſhe was ſoon left dry. There was no time to be loſt; the wreck was cleared away, and as much of the rigging and ſtores carried on ſhore as poſſible. The reſolution was immediately taken to ſail in one ſhip to Kamtſhatka, and there build a ſmall veſſel, during the winter, of the materials of the loſt ſhip. Not having time to break her up, it was alſo reſolved to burn her, as the quickeſt method of getting at her iron-work. This was put in execution on the 9th September.

* This boat rowed on board the other ſhip over the bar at anchor, and returned with the flood tide: ſhe could not turn in the breakers.

The wind was this morning moderate from the ſouth-weſt; but the ſurf beat with ſuch violence againſt the beach, that the ſpray nearly reached the church. It freſhened in the afternoon, and died away about midnight.

The loſs of this ſhip had been foretold by the *ſuperſtitious* inhabitants of the town, from the following remarkable circumſtance: In the ſpring of the year, a flight of crows were fighting in the air, and making a dreadful noiſe. One of them was killed by the reſt, and fell upon the deck of this ſhip. The whole ſwarm immediately deſcended, and entirely devoured the vanquiſhed bird, leaving no other veſtiges than the feathers behind. This very remarkable occurrence, which was related by all our officers, workmen, and inhabitants, happened while I was at Yakutſk.

I have judged it neceſſary to be particular in my account of this very unfortunate circumſtance; and ſhall only add, that it appeared to me very fortunate that the ſhip did not get into the breakers in the narrow channel; in which caſe ſhe muſt inevitably have been driven on the bank, and in all probability not a ſoul on board would have been ſaved. Captain Saretſheff was on board the Slava Roſſie, at anchor five miles out at ſea, without a boat.

The morning of the 10th would have been very favourable, with a leading wind from the north till 11 o'clock, when it veered to the ſouth-weſt. I was ſent on board the Slava Roſſie with ſtores, an anchor and cable, in the long boat. Captain Saretſheff lamented his not having been on ſhore, to have oppoſed the

the carrying out the ſhip under ſuch inauſpicious proſpects. He alſo expreſſed great regret at the ſhip's having been burnt; but was happy to hear that no lives had been loſt, except that of one man, who had neither wife, nor family, nor friends. The body of this man had been ſeen floating at no great diſtance from the ſhip, which filled every one on board with melancholy ſentiments. I returned in the evening with the tide. The next day Captain-Lieutenant Bering went on board, and in the evening Captain-Lieutenant Saretſheff returned.

September 14th. A courier arrived from St. Peterſburg, bringing intelligence of the war with Sweden, recommending the greateſt economy in our proceedings, (as money was extremely ſcarce in Ruſſia) and ordering the expedition to return to St. Peterſburg if we had not ſailed from the port of Ochotſk, or if things were not in complete readineſs for ſea; for they experienced a great want of naval officers and men. Towards evening it blew freſh from the ſouth-weſt, and precluded all communication between the parties on board and on ſhore.

On the 15th, it blew a hard gale from the ſouth-weſt. We ſeveral times obſerved from ſhore, that the ſhip drove, and towards night that her top-maſts were ſtruck. The gale continuing, we made fires along the beach, and obſerved a lanthorn on one of the maſt-heads.

The 16th, the gale continued with unabated violence, and we ſaw with our glaſſes that the ſhip had three anchors a-head; notwithſtanding which, ſhe frequently drove, and we expected her every moment on ſhore. She had very few hands on board and

no

no boat. The night was terrific, with very heavy rain. We again made fires all along the beach.

On the 17th our anxiety increaſed with the gale. We did not obſerve her drive; but frequently the thick weather hid her from our ſight: towards evening, however, to our great joy, the gale abated. Very early in the morning of the 18th, we ſent on board all neceſſary hands, ſtores, materials, &c. employing all the boats. We obſerved that the ſhip had driven above a mile to the north-eaſt into three and a half fathom water; and had ſhe gone about forty fathom further, ſhe would have got on a ſhoal.

On the morning of the 19th we had four inches of ſnow on the ground. Captain Billings and all abſolutely neceſſary hands embarked *; and about noon we weighed anchor, with a moderate ſouth-weſt breeze, ſhaping our courſe to the eaſt of the ſouth. On the 22d we ſaw an iſland bearing ſouth-weſt diſtant about forty miles, with detached rocks round about it. We hove the lead, and found bottom with twelve fathom line only. This ſmall iſland is not noted in any of the charts, and we gave it the name of Jonas's Iſland. On the 28th we paſſed the remarkable mountain called Alaid, riſing out of the ſea, and terminating in a cone. Some on board declared, that in clear weather they had ſeen it at 350 verſts diſtance: its ſituation, however, is about twenty miles from the ſouth point of Kamtſhatka. The ſame day we paſſed the Kurillan ſtraits between the ſecond and third iſland, and arrived at St. Peter and St. Paul the 1ſt day of October.

* We were compelled to leave ſeveral behind us, with ſtores, &c. who were to follow us to Kamtſhatka, with the tranſport veſſel, in the ſpring.

Nothing

Nothing intereſting, or worthy of notice, happened in this trip. We had very boiſterous weather, and a diſagreeable ſhort ſea until we came into the Northern Pacific Ocean, where we experienced an amazing difference in the climate, which was mild and pleaſant. In Kamtſhatka the weather was very agreeable. The kitchen gardens belonging to the Coſſacs were full of cabbages and other vegetables, and the views around were more beautiful than any thing of the kind that I ever remember to have ſeen. The looks of all the inhabitants ſeemed to evince health, plenty, and content: and, in ſhort, every thing was completely the contrary of what we had ſeen and felt on the river Kovima.

We unloaded and unrigged our ſhip, built barracks for our men, and ourſelves occupied the houſes of the inhabitants, three or four officers being ſtowed in a ſmall room; but before the winter ſet in we made additions to the buildings, lived very comfortably without diſtreſſing the inhabitants, and in perfect harmony with them. Fiſh and wild fowl were in great abundance. Potatoes, carrots, turnips, and cabbages, plenty; as well as ſeveral pleaſant roots and greens which grew ſpontaneous. Great variety of berries were found, and in ſufficient quantities to yield ſupplies of good drink. Beſides which, we brewed ſpruce-beer, and had a very plentiful ſtock of tolerably good French brandy.

We were viſited by Veroſhagin, the prieſt of Paratounka, and his family; and I was very happy to meet with a number of the acquaintances of my countrymen in Captain Cook's Expedition. Nothing in nature could be more pleaſant than the glow of friendſhip which animated their countenances with the livelieſt expreſſion of ſincere regard, when they mentioned the names of King, Bligh, Philips, Webber, and others; names that will be

handed down to poſterity by tradition in a Kamtſhatka ſong to their memory, with a chorus to the tune of *God ſave the King*; which is frequently ſung in perfect harmony, particularly by the family of Veroſhagin at Paratounka, by the different branches of which it was made. They deeply lamented the fate of Captain Clerke, whoſe tomb is now graced with an engraving on a ſheet of copper, containing a copy of the ſuperſcription painted on the board, and ſuſpended on the tree under which he lies buried; with this addition only, "Erected by Perouſe 1787, commander of the Expedition from France." Near this place is a half-decayed wooden croſs, denoting the place of interment of the naturaliſt De Liſle de la Croyere, who died in Commodore Bering's Expedition.—[*See the annexed* ENGRAVING.]

We made frequent excurſions and viſits, and were well entertained with ſongs, dances, &c. of which I purpoſe giving an account hereafter, with a deſcription of the country, and the cuſtoms and manners of the people.

Fine weather continued till the 16th November, when we had ſnow, and the appearance of winter ſetting in; the thermometer being 2, 3, and 4 degrees below the freezing point of Reaumur.

It was now neceſſary to diſcover the moſt eligible place for building a veſſel to accompany the Slava Ruſſie. The only wood produced about the bay of Avatſha is birch; but in the river Kamtſhatka are conſiderable woods of larch, fir, and common pine. Captain Billings reſolved upon viſiting the Kamtſhatka, in company with Captain Hall, and building in the Lower Town a cutter, as a conſort to the ſhip

They

Drawn by W. Alexander

Engraved by J. Powell

View of Capt. Clerke's Tomb at St. Peter & St. Paul.

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They quitted the harbour of St. Peter and St. Paul, with Mr. Bakoff and Surgeon Robeck, on the 24th November; leaving Captain Saretſheff to ſuperintend. Doctor Merck, Mr. Vaconin (the draftſman), a bird ſtuffer, and neceſſary aſſiſtance, ſet out the 4th December on an excurſion, to deſcribe the hot ſprings, and collect natural curioſities. About Chriſtmas, Mr. Shmaleff, the commander of this diſtrict, arrived, and increaſed the harmony and good humour of our ſociety.

Parties were ſent to Bolſhoiretſk and Virchnoi, or the Upper Town, to prevent their quarters being heavy on the inhabitants; and materials were forwarded by ſmall quantities to the Lower Town for building the veſſel; for which purpoſe trees were felled.

We paſſed a pleaſant and agreeable winter in different excurſions to Bolſhoiretſk, &c. enjoying all the good things in Kamtſhatka, and perfect health. The froſt was generally 5° to 8°. The ſevereſt cold that we had did not exceed 18°, and laſted only a few hours. Snow was very deep.

CHAP. XII.

Receive information from Peterſburgh of an Enemy's Ship (Swediſh) having been ſent into theſe Seas to annoy the Ruſſian Fur-Trade.—Depart from Avatſka Bay.—Captain Billings cauſes his Inſtructions to be read to the Officers, and declares his intention of ſteering to the North-weſt Coaſt of America.—Iſland of Amtſhitka.—Amli.—Oonalaſhka; Dreſs, Manners, &c. of the Natives.—Tyranny exerciſed over them by the Ruſſian Hunters.

EARLY in the month of March 1790, we were all collected together in the harbour of St. Peter and St. Paul, on the receipt of diſpatches from St. Peterſburg, confirming the Swediſh war, and informing us of a ſhip called the Mercury, mounting 16 guns, under the command of a Mr. Coxe, having been ſent into theſe ſeas by the Court of Sweden to annoy the Ruſſian fur-trade; which it was to be our buſineſs to prevent.

Towards the end of April the harbour was clear of ice; but the mountains were ſtill covered with ſnow, except ſuch parts as were oppoſed to the influence of the ſun, where vegetation began.

On the firſt of May all hands embarked, and the ſhip was hauled into the bay of Avatſha. The weather was clear and calm; we obtained ſome wild garlic (Tſheromtſha), and obſerved the hawthorn and birch beginning to bud.

We

We had 16 braſs three-pounders mounted, and on the morning of the 2d took our powder on board. We obſerved high water at the head of the inner harbour at full and change of the moon, at four hours and forty-three minutes: the greateſt riſe ſix feet.

Calms and contrary winds detained us till the 9th May, at four A. M.; when, a moderate breeze ſpringing up from the north north-weſt, we ſtowed away our boats, weighed anchor, and ſtood out of the bay, ſteering ſouth ſouth-eaſt, and keeping a middle courſe.

At eight A. M. the light-houſe bore north-weſt 15°, diſtant two leagues; our latitude 52° 49′ north, longitude 158° 47′ eaſt from Greenwich. From hence we took our departure; and at noon our latitude was 52° 46′ 4″, longitude 158° 54′.

At half-paſt ſeven in the evening, Avatſha Volcano bore north-weſt 35°, the light-houſe north-weſt 78°; and we ſhortly after loſt ſight of land. The weather was raw and cold; our thermometer indicated at midnight one degree above the freezing point; and we had a moderate ſoutherly breeze, the ſea running very high from the ſouth-weſt.

On the 10th we had a moderate breeze from the ſouth-weſt, with a rough ſea and hazy weather; our courſe ſouth-eaſt, which continued on the 11th. At noon our obſerved latitude was 51° 18′ 6″, longitude 161° 58′. During the day we ſaw ſeveral flights of ducks, numberleſs gulls, auks, and ſea-parrots; a few grampuſes and ſeals; and a plank very like the ſheathing of a ſhip. The afternoon was very hazy and cold. On the 12th, we had

light airs from the ſouth, and hazy weather. We ſaw during the day whales, ſeals, gulls, auks, &c. Our latitude, by account, 51° 5′, longitude 163° 50′.

In the morning of the 13th, Captain Billings had his inſtructions read to the officers; and told them, that his intention was to ſteer for the iſlands ſouth of Alakſa, and to the north-weſt coaſt of America; conſidering the ſurveying of the chain of Aleutan iſlands, ſo inaccurately laid down on the charts, as too dangerous to be attempted with a ſingle veſſel during the foggy ſeaſon.

We had a freſh breeze from the ſouth, and our courſe was eaſt north-eaſt. We reckoned our latitude at noon 51° 5′, longitude 166° 30′. Towards evening, we had variable light airs, and foggy weather. Light winds from the eaſt, and calms, continued during the 14th and 15th. The 16th, variable winds, and thick miſty weather. At noon ſaw ducks and ſmall birds flying to the eaſtward, and rock weeds floating; latitude, by account, 50° 40′, longitude 169° 5′. In the afternoon a gentle breeze ſprung up from the ſouth and ſouth-weſt; our courſe eaſt by north: we ſaw ſeveral flights of land birds.

The 17th, variable winds and rain. At noon, obſerved the latitude 51° 11′ 7″, longitude, by account, 170° 25′. At four P. M. a freſh breeze ſprung up from the north north-weſt with flying clouds at 4° 16′ 15″ apparent time; longitude, by time-keeper, 171° 18′ eaſt from Greenwich, latitude 51° 12′ 4″. The 18th, obſerved the latitude at noon 50° 49′ 23″; ſaw great quantities of rock-weed floating, and numbers of porpoiſes and birds. At four 50° 55′ P. M. apparent

time, longitude 173° 14′, latitude 50° 49′ 20″; variation of compaſs 13° 10′ eaſt. The 19th, we had a freſh breeze north by weſt; our courſe north-eaſt by eaſt; cloudy weather, with a hazy horizon. At noon, obſerved the latitude 50° 44′: the afternoon ſqually, with rain. According to Captain Billings's cuſtom, we went under an eaſy ſail every night, or laid-to. The 20th, at noon, we were in latitude 50° 27′ 52″, longitude, by account, 175° 40′. This day and the 21ſt we had variable light winds between the north and the eaſt, with raw miſty weather, 3° above the freezing point, and a moderate ſwell from the north-eaſt. The 22d blew freſh from the eaſt north-eaſt; kept a northern courſe all day; miſty and hazy weather; night ſqually, at times ſnow: and on the 23d the wind veered to north north-weſt, blowing freſh; the ſea running very high; ſteered north-eaſt. At noon, ſaw great quantities of rock-weed floating, and land-birds flying to the north. Got a ſight of the ſun, which gave the latitude 51° 6′ 43″, at 3° 41′ 15″ apparent time, longitude, by time-keeper, 177° 57′ 45″, latitude 51° 18′. At eight P. M. ſaw land north and north-eaſt, on account of which, and approaching night, cloſe-reefed top-ſails, and handed all ſmall ſails; the wind veered to weſt by ſouth, we kept our ſhip's head ſouth by weſt till day-light on the 24th, when we again ſtood to the north-eaſt. At 3° 30′ A. M. ſaw high land; and, when we got well in with it, ranged along the ſouth-ſide. It was the iſland Amtſhitka, the eaſtern extremity of which bore at noon north 20° eaſt, diſtant about 12 miles. It commences to the weſt with a low point of land, gradually riſing into moderate mountains, trending ſouth 49°, eaſt 25 miles; where it forms a head-land, from whence its direction is north 64°, eaſt 14 miles: to the eaſt and weſt are detached rocky iſles. The mountains were covered with ſnow, and no wood to be ſeen: our latitude, by account,

was 51° 18′, longitude 179° 25′. Squally weather, with a hard gale from the ſouth-weſt; the ſea running very high, and the ſurf breaking violently on a reef of hidden rocks near the land; our courſe eaſt. The 25th, wind more moderate; thick hazy weather; freſh gales, varying from ſouth-weſt to ſouth ſouth-eaſt; kept our courſe eaſt and eaſt north-eaſt; latitude, by account, at noon 50° 46′; towards night ſlackened ſail. The 26th, freſh eaſterly wind, which veered to eaſt, north-eaſt, north, and north-weſt by weſt, blowing hard with rain; the ſea running very high. At eight P. M. the gale, with ſqualls, brought us under our courſes, and we ſaw land in the haze; the weſtern cape north, 14° weſt, diſtance about four leagues: the eaſt extremity bore north. We ſuppoſed this to be the iſland of Adak; but, fearful of entangling the ſhip among iſlands ſo badly placed in our charts, it was thought proper to lay-to under mizen, main, and fore-ſail, with the ſhip's head to the weſtward, to wait day-light. The 27th, at four A. M., wore ſhip, and ſtood to the north-eaſt by eaſt under the above ſails, wind continuing north-weſt by weſt. At noon, our latitude obſerved was 51° 12′ 57″, corrected longitude 184° 55′; at three P. M. ſaw land, two mountains covered with ſnow, north 44° weſt, diſtant about 36 miles. At 3° 59′ 50″ P. M. apparent time, longitude, by time-keeper, 184° 35′ 30″, latitude 51° 18′ 52″; at the ſame time ſaw land, a high mountain north-weſt 38°, diſtant about 30 miles; ſoon hid by the haze; and, on account of approaching night, ſlackened ſail. The 28th, had a freſh gale at weſt ſouth-weſt; our courſe north-eaſt, the ſea running very high, and cloudy weather. At ten A. M. ſaw land, which we ſuppoſed to be the iſland of Amli; and, to get a better ſight of it, ſhaped our courſe north. At noon, the weſt cape of a bight bore north-weſt 21°; eaſt cape north-weſt 15°, diſtant eight miles; latitude obſerved 51° 55′ 23″, longitude, by account,

187°

187° 36′. The iſland of Amli, from the weſt point, trends 44 miles ſouth, 88° eaſt. At 4° 10′ 25″ P. M. apparent time, longitude, by time-keeper, 187° 12′, latitude 51° 55′ 9″, the variation of two compaſſes gave the mean 17° 7′ eaſt. The 29th, at noon, the latitude obſerved was 52° 23′ 53″; corrected longitude 190° 14′; freſh breezes from the ſouth-weſt; our courſe north-eaſt. Till noon of the 30th, variable light airs; latitude obſerved 52° 34′ 5″, corrected longitude 191° 2′. In the afternoon, little wind from the north-weſt, ſteering north-eaſt at 5° 24′ 25″ P. M. apparent time; longitude by time-keeper 191° 2′, latitude 52° 37′ 7″. We ſaw land to the north all night, and ſtood to the weſt ſouth-weſt. At day-light of the 31ſt reſumed our courſe north-eaſt. At 8° 23′ 20″ P. M. apparent time, our longitude was 191° 40′, latitude 52° 40′ 5″. Towards noon rainy weather.

In the morning of the 1ſt June, at 4° 30′ we roſe the iſland of Oonalaſhka in the north-eaſt. At 8° 5′ 45″ A. M. our longitude was 192° 41′ 15″, latitude 52° 51′ 17″, little wind at north north-weſt, which died away to a calm. At four P. M. had a gentle breeze from the north north-weſt again; and at 6° 26′ 25″ A. M. the time-keeper gave the longitude 193° 2′ 15″, latitude 52° 59′. On the 2d variable light airs and calms. At noon our latitude obſerved was 53° 3′ 29″, corrected longitude 193° 47′. We were now well in with the land of Oonalaſhka, which appeared every where high, formed of projecting promontories and inland high mountains. In the forenoon of the 3d June, numbers of the natives came alongſide. We threw our main-top-ſail to the maſt, and took them on board. At noon we obſerved the latitude 53° 45′ 4″. At four P. M. a Ruſſian hunter of Tſhirepanoff's company came alongſide in a baidar rowed by eight Alcutes. He had been along ſhore in ſearch of drift wood for firing,

with a number of Alcutes, ſome of whom brought us a good ſupply of Halibut. They conducted us into a bay which the Ruſſians call Bobrovoi Guba, or the Bay of Otters, where we came to anchor at eight P. M. oppoſite the habitations of the natives. We ſent an officer to ſound, and hauled into the bay about 40 fathom from ſhore.

Captain Billings landed with his aſtronomical tent; Dr. Merck went out on an excurſion for curioſities; and Captain Saretſheff, with aſſiſtants, was ſent to ſurvey; while I employed myſelf in getting the beſt information that I could obtain of the inhabitants, who with the people of Oomnak, call themſelves Cowghalingen. This habitation they call Sidankin. It is on the ſmall iſland Sithanak, ſeven miles from north-eaſt to ſouth-weſt, which is ſeparated from Oonalaſhka by ſtraits of only a few fathom wide, and appears to be the ſouth-weſt extremity of the iſland. It conſiſts of barren mountains of a moderate height, compoſed of hard ſtone of a glaſſy nature, and generally of a greeniſh hue: ſome, however, is black. Behind the huts is a lake of ſome extent (evidently ſupplied by the melting ſnow from the mountains), with a ſmall outlet or run into the ſea. Here we took a ſupply of freſh water, which was not very good.

About five families reſide here. The natives of Alakſa and all the adjacent iſlands they call Kagataiakung'n, or eaſtern people: the iſlanders of Oone-agun (Tſhettiere Sopoſhnoi) they call Akohgun.

The people are of middle ſize; of very dark brown and healthy complexion; round face in general, ſmall noſe, black eyes and hair, the latter very ſtrong and wiry. They have ſcanty beards,

Alexander del. Neagle Sculp.t

A Man and a Woman of Oonalashka.

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but very thick hair on the uper lip. The under lip is, in general, perforated, and ſmall ornaments of bone or beads inſerted; as is alſo the ſeptum of the noſe. Women have the chin punctured in fine lines rayed from the centre of the lip, and covering the whole of the chin. The arms and cheeks of ſome are alſo punctured. They are very clean in their perſons; and the men very active in their ſmall baidars. The women are chubby, rather pretty, and very kind.

They formerly wore a dreſs of ſea-otter ſkins, but not ſince the Ruſſians have had any intercourſe with them. At preſent they wear what they can get; the women, a park of kotik, or urſine ſeal, with the hair outward. This is made like a carter's frock, but without a ſlit on the breaſt, and with a round upright collar, about three inches high, made very ſtiff, and ornamented with ſmall beads ſewn on in a very pretty manner. Slips of leather are ſewn to the ſeams of this dreſs, and hang down about 20 inches long, ornamented with the bill of the ſea-parrot, and beads. A ſlip of leather three or four inches broad hangs down before from the top of the collar, covered fancifully with different coloured glaſs-beads, and taſſels at the ends: a ſimilar ſlip hangs down the back. Bracelets of black ſeal-ſkin are worn round their wriſts about half an inch broad, and ſimilar ones round their ankles, for they go barefooted; and this is all their dreſs. Their ornaments are rings on the fingers, ear-rings, beads and bones ſuſpended from the ſeptum of the noſe, and bones in the perforated holes in the under lip. Their cheeks, chin, and arms, are punctured in a very neat manner. When they go a-walking on the rocky beach, they wear an aukward kind of boot, made of the throat of the ſea-lion, ſoled with thick ſeal-ſkin, which they line with dry graſs. The men wear a park of birds' ſkin, ſome-

times the feathers outward, and ſometimes inward. The ſkin ſide is dyed red, and ornamented with ſlips of leather hanging down a conſiderable length; the ſeams covered with thin ſlips of ſkin, very elegantly embroidered with white deer's hair, goat's hair, and the ſinews of ſea animals, dyed of different colours. They alſo wear tight pantaloons of white leather, and boots as deſcribed to be worn by the women at times: the men wear them when they go on foot; but in their baidars or their huts they are without either pantaloons or boots. The men have their hair cut ſhort; the women wear theirs ſhort before, combed over the forehead, and tied in a club on the top of the back part of the head. In wet weather, or when out at ſea, they wear a camley; which is a dreſs made in the ſhape of the other, but formed of the inteſtines of ſea animals; the bladder of the halibut, or the ſkin off the tongue of a whale. It has a hood to cover the head, and ties cloſe round the neck and wriſts; ſo that no water can penetrate: it is nearly tranſparent, and looks pretty. The men wear a wooden bonnet, ornamented with the whiſkers of the ſea-lion, and with beads, which make very pretty nodding plumes; and this ſerves to faſten the hood of their camley to the head. The women's park is called tſhoktakuk, the men's iaſh; the boots, ooleegich. Both men and women are very fond of amber for ornaments, as alſo of a thin ſhelly ſubſtance formed by worms in wood, about two inches long, thin, tapering, and hollow.

Their inſtruments and utenſils are all made with amazing beauty, and the exacteſt ſymmetry; the needles with which they ſew their clothes and embroider are made of the wing-bone of the gull, with a very nice cut round the thicker end, inſtead of an eye, to which they tie the thread ſo ſkilfully, that it follows the needle without any obſtruction. Thread they make of the

ſinews

ſinews of the ſeal, and of all ſizes, from the fineneſs of a hair to the ſtrength of a moderate cord, both twiſted and plaited; the plaited cords of their darts, to which they tie the gut of the ſeal blown out to ſerve as a float, are very beautifully ornamented with red downy feathers, and goat's hair; as are alſo the different ſtrings with which they faſten the wriſts and other parts of their cloathing, &c.

Their darts are adapted with the greateſt judgment to the different objects of the chaſe; for animals, a ſingle barbed point; for birds, they are with three points of light bone, ſpread and barbed; for ſeals, &c. they uſe a falſe point, inſerted in a ſocket at the end of the dart, which parts on the leaſt effort of the animal to dive, remaining in its body. A ſtring of conſiderable length is faſtened to this barbed point, and twiſted round the wooden part of the dart; this ſerves as a float to direct them to the ſeal, which, having the ſtick to drag after it, ſoon tires, and becomes an eaſy prey. It, however, requires ſkill to humour it, perhaps equal to our angling. The boards uſed in throwing theſe darts are equally judicious, and enable the natives to caſt them with great exactneſs to a conſiderable diſtance.

The baidars, or boats, of Oonalaſhka, are infinitely ſuperior to thoſe of any other iſland. If perfect ſymmetry, ſmoothneſs, and proportion, conſtitute beauty, they are beautiful; to me they appeared ſo beyond any thing that I ever beheld. I have ſeen ſome of them as tranſparent as oiled paper, through which you could trace every formation of the inſide, and the manner of the natives' ſitting in it; whoſe light dreſs, painted and plumed bonnet, together with his perfect eaſe and activity, added infinitely to its elegance. Their firſt appearance ſtruck me with amazement beyond

expreſſion.

expreſſion. We were in the offings, eight miles from ſhore, when they came about us. There was little wind, but a great ſwell of the ſea: ſome we took on board with their boats; others continued rowing about the ſhip. Nearer in with the land we had a ſtrong rippling current in our favour, at the rate of three miles and a half, the ſea breaking violently over the ſhoals, and on the rocks. The natives, obſerving our aſtoniſhment at their agility and ſkill, paddled in among the breakers, which reached to their breaſts, and carried the baidars quite under water; ſporting about more like amphibious animals than human beings. It immediately brought to my recollection, in a very forcible light, Shakeſpeare's expreſſion—

"He trod the water,
"Whoſe enmity he flung aſide, and breaſted
"The ſurge moſt ſwoln that met him."

Theſe baidars are built in the following manner: A keel eighteen feet long, four inches thick on the top, not three inches deep, and two inches, or ſomewhat leſs, at the bottom. Two upper frames, one on each ſide, about an inch and a half ſquare, and ſixteen feet long, join to a ſharp flat board at the head, and are about ſixteen inches ſhorter than the ſtern, joined by a thwart which keeps them about twelve inches aſunder. Two ſimilar frames near the bottom of the boat, ſix inches below the upper ones, about one inch ſquare. Round ſticks, thin, and about ſix inches diſtant from each other, are tied to theſe frames, and form the ſides; for the top thwarts, very ſtrong ſticks, and nearly as thick as the upper frames, curved ſo as to raiſe the middle of the boat about two inches higher than the ſides. There are thirteen of theſe thwarts or beams: ſeven feet from the ſtern is one of them; twenty inches nearer the head is another; a hoop about

two

two inches high is faſtened between them, for the rower to ſit in. This is made ſtrong, and grooved to faſten an open ſkin to, which they tie round their body, and it prevents any water getting into the boat, although it were ſunk. This frame is covered with the ſkin of the ſea lion, drawn and ſewn over it like a caſe. The whole is ſo extremely light, even when ſodden with water, that it may be carried with eaſe in one hand. The head of the boat is double the lower part, ſharp, and the upper part flat, reſembling the open mouth of a fiſh, but contrived thus to keep the head from ſinking too deep in the water; and they tie a ſtick from one to the other to prevent its entangling with the ſea weeds. They row with eaſe, in a ſea moderately ſmooth, about ten miles in the hour, and they keep the ſea in a freſh gale of wind. The paddles that they uſe are double, ſeven or eight feet long, and made equally neat with the other articles.

The women plait very neat ſtraw mats and baſkets; the former ſerve for curtains, ſeats, beds, &c.; the latter to contain their work and other implements. Their trinkets and coſtly ornaments are kept in ſmall wooden boxes with draw lids.

I obſerved in all the huts a baſket containing two large pieces of quartz, a large piece of native ſulphur, and ſome dry graſs or moſs. This ſerves them in kindling fires; for which purpoſe they rub the native ſulphur on the ſtones over the dry graſs, ſtrewed lightly with a few feathers in the top where the ſulphur falls; then they ſtrike the two ſtones one againſt the other; the fine particles of ſulphur immediately blaze like a flaſh of lightning, and, communicating with the ſtraw, ſets the whole in a flame.

Their

Their only muſic is the tambour, to the beat of which the women dance. Their holidays, which are kept in the ſpring and autumn, are ſpent in dancing and eating. In the ſpring holidays, they wear maſks, neatly carved and fancifully ornamented. I believe that this conſtitutes ſome religious rite, which, however, I could not perſuade them to explain: I attribute this to the extraordinary and ſuperſtitious zeal of our illiterate and more ſavage prieſt *, who, upon hearing that ſome of our gentlemen had ſeen a cave in their walks, where many carved maſks were depoſited, went and burnt them all. Not ſatisfied with this, he threatened the natives for worſhiping idols, and I believe I may ſay *forced* many to be chriſtened by him, without being able to aſſign to them any other reaſon than that they might now worſhip the Trinity, pray to St. Nicholas and a croſs which was hung about their necks, and that they would obtain whatever they aſked for; adding, that they muſt renounce the devil and all his works, to ſecure them eternal happineſs. It appeared to me that they regarded this as an inſult; be that as it may, however, they were not pleaſed, but had not power to reſent.

They have no marriage ceremony among them, but purchaſe of father and mother as many girls as they can keep; and, if they repent of their bargain, the girl is returned, and a part of the purchaſe given back. They formerly uſed to keep objects of unnatural affection, and dreſs theſe boys like women.

* I have called the prieſt more than ſavage, and ſhall relate a circumſtance that happened in proof. While he was travelling from Yakutſk to Ochotſk, he loſt ſome proviſion on the road. On a mere ſuppoſition that his two Tartar guides had taken it, he tied each of them up by an arm to a tree, and had them flogged to ſuch a degree, that one of them died, and the other never recovered the uſe of his arm: it was afterwards known, that ſome runaway exiles hid in the woods were the thieves. The prieſt ſaid, *there was no harm done; they were not Chriſtians.*

At

At births alſo, no ceremony is uſed, except waſhing the infant.

They pay reſpect, however, to the memory of the dead; for they embalm the bodies of the men with dried moſs and graſs; bury them in their beſt attire, in a ſitting poſture, in a ſtrong box, with their darts and inſtruments; and decorate the tomb with various coloured mats, embroidery, and paintings. With women, indeed, they uſe leſs ceremony. A mother will keep a dead child thus embalmed in their hut for ſome months, conſtantly wiping it dry; and they bury it when it begins to ſmell, or when they get reconciled to parting with it.

They dry ſalmon, cod, and halibut, for a winter's ſupply, and collect edible roots: this, however, is not for themſelves, but for ſuch Ruſſian hunters as may chance to viſit them. At this time there are twelve Ruſſians and one Kamtſhadal, of Tſhirepanoff's company of hunters on the iſland. They have lived here eight years, but are going this year back to Ochotſk. Theſe people lord it over the inhabitants with more deſpotiſm than generally falls to the lot of princes; keeping the iſlanders in a ſtate of abject ſlavery; ſending parties of them out on the chaſe, and to their veſſel, which now lies in the Straits of Alakſa; ſelecting ſuch women as they like beſt, and as many as they chooſe. They ſeem to me to have no deſire to leave this place, where they enjoy that indolence ſo pleaſing to their minds; for, by changing of places, they change ſituations, and become themſelves as much the ſlaves of power, as the poor natives are to them.

I obſerved, in croſſing the mountains, piles of ſtones. Theſe are not burying-places, as has been ſuppoſed, but ſerve as beacons

to guide them in foggy and ſnowy weather from one dwelling to the other; and every perſon paſſing adds one to each heap. The only obſervations that we made on ſhore proved our time-keeper ſtill going as when we left Kamtſhatka; our latitude 53° 56′, longitude 194° 20′; variation of the compaſs 19° 35′ eaſt.

CHAP.

CHAP. XIII.

Depart from Oonalaſhka.—See the Iſland of Sannach.—The Shumagins.—Aleutes oppreſſed by the Ruſſian Hunters.—Iſlands of Evdokeeff.—Come to anchor in the Harbour of Kadiak.—Particulars reſpecting that Iſland and its Inhabitants.

On the 13th June, at eight A. M., having taken in a ſupply of freſh water, and ballaſt, we weighed anchor, with a gentle breeze north-weſt; but, finding that we could not weather the rocks off the eaſtern cape, again came to anchor near our old ſtation, where we remained till the evening of the 17th, when, the wind ſhifting more to the north, we weighed, and got out. Our ſoundings in the bay were 17, 16, 15 fathoms; ſuddenly deepening ſo, that we got no bottom cloſe in with land with 100 fathoms line. At midnight hoiſted in our boats, and proceeded with light airs and foggy weather. The 18th, at 10 A. M., the volcano on the iſland of Akutan bore north-weſt 81°. Three conical mountains on the iſland of Oonimak bore, the firſt, north-weſt 18°; the ſecond, north-weſt 2°; the third, north-eaſt 12°. At noon, our diſtance made was 41 miles ſouth-eaſt 86°; latitude obſerved 53° 52′ 6″, longitude 194° 43′. At one P. M. the volcano in Oonalaſhka ſouth-weſt 77°; weſt cape of Akutan ſouth-weſt 86°; the firſt mountain in Oonimak, called by the natives Koogidan Kaigutſhin, north-weſt 12°; the volcano called Agaiedan, north-eaſt 8°; the third mountain, Khaiginak, north-eaſt 15°. At

4° 30′ 55″ apparent time, the longitude proved, by time-keeper, - - - 195° 35′ 15″

Latitude - 53° 58′ 6″

Variation of the compaſs 0° 19′ 40″

The evening was very foggy, with rain, light airs from the weſtward, and calms. At midnight we got ſoundings with 60 fathom line; a muddy and black ſandy bottom.

The morning of the 19th was very foggy, with variable light airs from ſouth ſouth-weſt to ſouth ſouth-eaſt. We ſaw a number of the kotic, or urſine ſeals, ſporting about the veſſel; alſo one ſea-otter. At eight o'clock we had a gentle breeze from the ſouth-eaſt, hazy, and rain; ſoundings 30 fathoms. We were well in with the iſland of Oonimak, upon which the fog reſted; it trends from the weſtern extremity ſouth-eaſt 63°, 18 miles; to the northern cape 19 miles in a direction north-eaſt 62°. The land is high, broken, and rugged, and there are three very conſpicuous mountains upon it. The ſummit of the firſt is very irregular; the ſecond is a perfect cone towering to an immenſe height, and diſcharging a conſiderable body of ſmoke from its ſummit; the third (Khaginak) has its ſummit apparently rent and broken, covered with ſnow, and towering above the fog which covered the middle of the land. On the lower parts of them, and in the vallies, no ſhrub nor buſh was to be ſeen: our latitude at noon was, by reckoning, 54° 25′, longitude 196° 6′. In the afternoon we had a freſh breeze from the ſouth-eaſt by eaſt; our courſe north-eaſt by eaſt; keeping the lead going; ſoundings pretty regular for 30 to 45 fathom. At eight P. M. we tacked and ſtood ſouth by weſt and ſouth away from the land.

The

The 20th, at three A. M. we again tacked for the iſlands, and ſhaped our courſe to the eaſtward; our ſoundings varying from 46 to 33 fathom, ſmall ſtones, ſhells, and ſand. It blew freſh, and was hazy with rain. At half paſt four in the morning, the weather cleared up a little, and diſcovered the iſland of Sannach, with rocks and breakers over a reef, about a mile right ahead of the ſhip, ſo that we had but juſt time to get clear of them. This iſland is inhabited by a few Aleutan families; and in the middle of it are three conſiderable mountains, joining together. The eaſt and weſtern extremities are low land, and appear verdant, but without wood. It is ſurrounded by a reef of rocks, ſome above water, and the ſurf breaking violently over others. At noon our latitude was 54° 22′, longitude 197° 37′, and our diſtance from land 12 miles. The eaſt cape bore ſouth 55° weſt; the weſtern cape ſouth-weſt 57° 30′. I compute the length of the iſland at 15 miles. Cape Alakſa lies nearly north of the mountains on this iſland; the diſtance about 38 miles.

Shortly after ſeeing this place (Cook's Halibuts Iſland) we roſe a number of ſmaller, forming the group called Shumagins, from their firſt diſcoverer,—a ſailor in Bering's expedition. They extended from north-weſt to north-eaſt, as far as the eye could reach. At one in the morning we were pretty cloſe in with the moſt remarkable of them, called by the natives Animok, and by the Ruſſians Olenoi. This is very high and bluff; the others are leſs elevated. This is in latitude 54° 44′, longitude 198°, and about ten leagues from Alakſa. All theſe iſlands are ſurrounded by rocks, ſome above water, and others only diſcernible by the breakers. We could not get a good view of the main land, on account of the thick weather; but now and then ſaw the tops of tremendous mountains covered with ſnow.

We

We had a freſh breeze from the weſt, ſailing under cloſe-reefed topſails at about ſix miles, north-eaſt and north north-eaſt; hazy, with a rough ſea. Towards night the wind fell ſcant. On account of the immenſe number of iſlands, we ſtood to the weſt ſouth-weſt and ſouth-weſt, with the intent of ſtanding in again at day-light to view them.

Early in the morning of the 21ſt, we had a gentle breeze from north north-weſt, with pretty clear weather. At 4° we obſerved cape Alakſa north-weſt 68°, at 8° 31′ 45″; our time-keeper gave the longitude 199° 32′ 45″, latitude 55° 3′ 54″. The iſlands Nagai and Kagai being right a-head, we wiſhed to go between them; but the breakers induced us to give up this idea, and vary our courſe from eaſt north-eaſt to eaſt by ſouth, with a weſterly breeze, going at four knots. At 5° 17′ 20″ P. M. longitude by time-keeper 200° 35′, latitude 54° 54′ 24″. At half paſt ſeven in the evening, we obſerved a three-ſeated baidar, and five ſmaller ones, near the ſhip. When they came alongſide we hoiſted the rowers and their baidar on board, and learned that they were out on the chaſe for ſea lions and ſeals; that their company conſiſted of more than one hundred Aleutes, under the direction of the Ruſſian in the three-ſeated baidar; and that they were hunting for Panoſsky's veſſel, now lying off Alakſa. We laid-to about three hours with our main topſail to the maſt; and at day-break of the 22d ſent them off. The Aleutes left us with reluctance, and complained bitterly of the treatment that they met with, and of being compelled to ſerve for years without receiving any recompence. We, however, had interpreters on board, and could not keep them. At noon our obſerved latitude was 55° 9′ 27″, variable light airs. At 5° 7′ 45″ P. M. our time-keeper gave the longitude 201° 59′, latitude 55° 11′ 20″.

All

All the 23d we had variable light airs and calms, with foggy and hazy weather.

The group of Shumagin iſlands are very cloſe together, almoſt innumerable, and extend from Alakſa ſouth 15 or 16 leagues, and from eaſt to weſt about 60 leagues; all of them high and barren, exhibiting a great ſimilarity in their appearance, though of various forms and ſizes. Neither tree nor ſhrub is to be ſeen upon them. The low places appear green; but a browniſh hue diſtinguiſhes all the higher mountains, except ſuch as are covered with ſnow. Some project into the ſea in rugged cliffs; ſome are ſharp capes, and often terminate in bluff heads. There appear ſome convenient coves; but it would be hazardous to enter them, on account of the detached and ſunken rocks that are ſcattered about: nor are there any navigable ſtraits between them; but they muſt be paſſed either to the ſouth, or cloſe in with Alakſa. Theſe iſlands are generally frequented by ſome company of hunters for ſeals, ſea lions, and birds. Sea otters are very ſeldom found hereabout; but whales are very numerous, as are ſeals of different kinds, &c. We ſent our jagers out in the boats during the calm to ſhoot birds, ſome of which we found very good eating.

Variable winds and hazy weather continued till the 24th at noon, when we got a ſight of the ſun, and our latitude proved 55° 41′ 7″, longitude 201° 43′. About half paſt twelve a gentle breeze ſprung up from the ſouth; and, ſailing north by eaſt about two knots, at one we ſaw land ahead. At ſeven in the afternoon we roſe more land, bearing north-eaſt and ſouth-eaſt; ſoundings 37 fathoms, fine ſand. At midnight bore away to the ſouth-weſt about two hours, when we again ſtood in for land, which is called

called by the Ruſſians the iſlands of Evdokeeff (the largeſt, Simedan), which bore, the 25th at noon, ſouth-eaſt, diſtant about 10 miles; our latitude obſerved, 56° 10′ 40″, longitude corrected, 202° 55′. We ſent out a jager, with two Aleutes, to ſhoot birds. At two we had variable light winds and cloudy weather. Three baidars came along-ſide, with a Ruſſian hunter from Shelikoff's Eſtabliſhment at Kadiak, having about 200 natives in company, in chaſe of ſea-lions, kotic, and other ſeals, birds, &c. At three P. M. being about three miles from the iſlands, Captain Billings went on ſhore with the naturaliſt. It was almoſt calm; and at five P. M. he returned, deſcribing the iſlands as complete rocks of coarſe granite, with a few ſtunted vegetables growing on the low parts. Our three hunters (who went out in a three-ſeated baidar purchaſed at Oonalaſhka), not returning, we fired ſignal guns. At ſix P. M. the natives, &c. left us, and the Ruſſians promiſed to ſeek our men and ſend them off. We lay-to all night, with our main-top-ſail to the maſt, and kept a lanthorn at the mizen peak. At four o'clock in the morning of the 26th, a gentle breeze ſprung up from the ſouth-eaſt, and we kept plying off the iſlands, with very hazy weather. At ſix the men came on board, telling us, that they had loſt ſight of the ſhip in the haze, and only ſaw her this morning at day-light, when they put off. At 7° 50′ 10″ we got a ſight of the ſun; longitude, by time-keeper, 203° 20′, latitude 56° 15′ 39″. At noon, our obſerved latitude was 56° 20′ 24″; the afternoon cloudy, with a moderate breeze from ſouth-eaſt, ſteering north-eaſt by eaſt. At two P. M. we ſaw the iſland Okamok in the hazy horizon, bearing ſouth-eaſt 56°, diſtant about ſix leagues; and at eight P. M. it fell little wind and rain.

June 27th, at five A. M., we ſaw the lofty mountains on the iſland of Kadiak; and at eight P. M. ſaw the low iſlands Tooge-

dach and Sichtunach, diſtinguiſhed in Captain Cook's chart by the name of Trinity iſland.

The 28th, at break of day, we got in pretty well with the iſland of Kadiak, keeping an eaſterly courſe with variable light winds between the north and weſt, and a clear ſky. At five A. M. numbers of the natives came off in their canoes, of whom the greater part were taken on board and ſerved as pilots, deſcribing with great accuracy the depth of every opening.

The ſouth extremity of this iſland forms a low point of land called by Captain Cook Trinity Cape. It runs out narrowing from mountains of a moderate height. Off this cape, at the diſtance of one mile, is the iſland Anayachtalak, which Shelikoff names Egichtalik, about three miles and a half north of Trinity Iſland. The ſtraits have ſoundings from 36 to 16 fathom, over a bottom of coral and ſhells. Toogidach is low and barren; Sichtunach lies to the eaſt of it three miles. This is low in the middle, with a ſmall bay, but both the extremities are high land. The weſtern part of Kadiak, though mountainous, is interſperſed with vallies, which produce only a few low ſhrubs, and appear at a ſmall diſtance like inlets; but a barrier of ſurrounding rocks forbids the approach of any veſſel. In the afternoon we had gentle gales from the ſouth-weſt and weſt; our courſe was north-eaſt, and north-eaſt by north. At 4° 45′ 50″ apparent time, our longitude proved, by the time-piece, 205° 50′ 30″, latitude 56° 49′ 8″; variation 27° eaſt. When the north-eaſt bluff cape of Sichtunach bore ſouth-weſt 49°, diſtant two miles and a half, the eaſtern point of Anayachtalak was north-weſt 79°, by compaſs, diſtant about two miles. Having paſſed theſe ſtraits at 10 o'clock in the evening, with a weſterly breeze and ſqualls, we got cloſe

in with a ſmall iſland called by the natives Naſikan, 200 fathoms from Kadiak. We paſſed theſe ſtraits with 24 and 25 fathoms water over a rocky bottom, and ſoon after ſhaped our courſe north north-weſt for the bay. Naſikan is a remarkable iſland, two miles long, and one wide; conſiſting of two round-topt mountains, which cauſed Captain Cook to name it Two-headed Point. Another projecting promontory, three miles from Two-headed Point, in a direction eaſt by north, he called Cape Barnabas. This is the ſouthern cape of the iſland Kunakan, or Kukan, and bears ſouth-eaſt of the bay, Treck Svatiteley, in which Shelikoff has his Eſtabliſhment: between theſe two iſlands are the ſtraits that lead to the bay, which is about a mile wide at the mouth, where ſoundings increaſe to 50, 70, and 75 fathoms. On entering the bay the 29th at day-break, with a moderate breeze from the weſt and weſt by ſouth, we could not get ſoundings with 100 and 150 fathom line. The ſhores are ſteep and rocky; ſome detached rocks run out a great way, and are nearly hidden at high water. We found great difficulty in getting into the harbour, owing to contrary winds; and the great depth prevented our ſending out a kedge. We therefore plyed to windward till half-paſt three in the afternoon, when we got above the harbour cloſe in with the weſtern ſhore, where we ſent a tow-line with all the hands that we could ſpare, who, aſſiſted by the natives, hauled the ſhip into the ſmall harbour, and we came to anchor in a muddy bottom, eight fathom, at ſix P. M. Here we made the following obſervations:

This and the nearer iſlands are inhabited by about 1300 grown males, and 1200 youths, with about the ſame number of females, according to the regiſter kept by Shelikoff's Eſtabliſhment, now under the direction of Yefſtrat Ivaniſh Delareff, a Greek; who informed

informed me, that he had now out on the chaſe, for the benefit of the Company, upwards of 600 double baidars of the natives, containing each two or three men. Theſe are divided into about ſix parties, each under the direction of a ſingle Peredoſſhik, or Ruſſian leader. Beſide theſe, ſmall parties are ſent out daily to fiſh for halibut, cod, &c. Females are employed in curing and drying fiſh; in digging, waſhing, and drying edible roots; in collecting uſeful plants, berries, &c.; and in making the dreſſes of the natives, as alſo for the Ruſſians. About two hundred of the daughters of the chiefs are kept at the Ruſſian habitations near our anchoring place, as hoſtages for the obedience of the natives; and, as far as I could learn, they are perfectly well ſatisfied with the treatment they meet with. The males are leſs ſatisfied; and, at the firſt arrival of the Ruſſians, ſeemed inclined to oppoſe their reſiding on the iſland; but Shelikoff, ſurpriſing their women collecting of berries, carried them priſoners to his habitation, and kept them as hoſtages for the peaceable behaviour of the men, only returning wives for daughters, and the younger children of the chiefs. Every conſiderable habitation of the natives had large baidars capable of containing forty or fifty men. Theſe were all purchaſed by Shelikoff; and the natives are now in poſſeſſion only of ſmall canoes, none of which carry more than three. They ſeem reconciled to the rules introduced by the preſent chief of the company, Delareff, who governs with the ſtricteſt juſtice, as well natives as Ruſſians, and has eſtabliſhed a ſchool, where the young natives are taught the Ruſſian language, reading, and writing. He allows a certain number of the hoſtages to viſit their relations for a ſtipulated time; theſe returning, others are allowed to go; and, upon application of any one for his child's abſence, it is not refuſed. The whole number of hoſtages is about three hundred.

The males are employed in the chaſe in rotation, as are alſo the females: I mean, for the benefit of the community; for they lay in an amazing ſtock of proviſions, roots, berries, &c. to be ſufficient for a winter's ſupply for the whole iſland, natives as well as Ruſſians; a circumſtance which ſeems, more than any thing elſe, to convince the ſavages that the Ruſſians are not their abſolute enemies; for Delareff ſays, that they never laid in a ſupply of food for the winter till the Ruſſians taught them; but, in bad weather, were obliged to collect cockles, muſcles, and other ſhell-fiſh, or refuſe of the ſea.

Luxuries, ſuch as tobacco, beads, linen, ſhirts, and nankeen dreſſes, they pay for in particular. I obſerved, that ſuch of the parties as were ſucceſsful in procuring rich ſkins, received a ſtipulated payment; for each ſea-otter, a ſtring of beads about four feet long; for other furs in proportion; and that only food and the ſkins of ſeals were the property of the community, of which the natives certainly enjoy the greater ſhare, being by far the more numerous; and the ſkins of ſeals are chiefly uſed by the natives to mend their baidars, and make new ones; in the latter caſe, they are purchaſed for furs, foxes, marmot, otters, &c. or by ſervice.

This Eſtabliſhment conſiſts of about fifty Ruſſians, including officers of the company, and Sturman Iſmailoff, who is here, on the part of government, to collect tribute: this is the ſame Ruſſian officer that was ſeen, by Captain Cook's Expedition, at Oonalaſhka, in the year 1778. He was one of the aſſociates of Benyowſky's conſpiracy (by his own account forced away); but Benyowſky only carried him to one of the Kuril iſlands, where he

he flogged him and put him on ſhore, with ſeveral others that were diſaffected.

The buildings conſiſt of five houſes after the Ruſſian faſhion. Barracks laid out in different apartments, ſomewhat like the boxes at a coffeehouſe, on either ſide, with different offices: An office of appeal to ſettle diſputes, levy fines, and puniſh offenders by a regular trial; here Delareff preſides; and I believe that few courts of juſtice paſs a ſentence with more impartiality: An office of receival and delivery, both for the company and for tribute: The commiſſaries' department, for the diſtribution of the regulated portions of proviſion: Counting-houſe, &c.: all in this building, at one end of which is Delareff's habitation. Another building contains the hoſtages. Beſide which, there are ſtorehouſes, warehouſes, &c. rope-walk, ſmithy, carpenters' ſhop, and cooperage.

Two veſſels (galliots) of about 80 tons each are now here, quite unrigged, and hauled on a low ſcaffold near the water's edge. Theſe are armed and well guarded, and ſerve for the protection of the place. Several of the Ruſſians have their wives with them, and keep gardens of cabbages and potatoes, four cows and twelve goats. Delareff is of opinion, that corn will grow near the eſtabliſhment which they are about forming in Cook's river.

One of the Ruſſian officers, who has cohabited with a female native ſome years, and has had ſeveral children by her, applied to our prieſt to chriſten her in form, and then join them together in the holy bands of matrimony; which was done. She is a handſome woman, but punctured on the chin, and her under lip is perforated. Her houſe was extremely clean, as were alſo her children, and the latter apparently very healthy. She was dreſſed in

the Siberian faſhion, and ſeemed perfect miſtreſs of Ruſſian economy. I dined with them, and was very well ſatisfied with the treatment that I met with.

It was matter of amazement to me, while in Irkutſk, Yakutſk, and Ochotſk, to hear the very high wages given by Shelikoff to his common ſailors; being from 600 to 1000 ſilver rubles yearly: their engagement, however, obliges them to purchaſe all their neceſſaries and luxuries of the Company at the market price. Here is only one market, which is the Company's ſtock; and the prices of articles are as follow: Brandy, one ruble per glaſs; tobacco, 50 rubles per lb. and ſometimes more; a ſhirt, made of Ruſſian coarſe check, ſomething reſembling buntine in the looſeneſs of the thread, 10 rubles; boot legs, without ſoles, 15 rubles and upwards; and every thing in proportion: ſo that their expences (they not being allowed to trade) exceed their ſalaries. Some of the men bitterly complained of this; but they laid nothing to the charge of Delareff: on the contrary, every one, native and Ruſſian, ſpoke highly in his favour, and acknowledged ſeveral indulgencies received at his hands.

Shelikoff has called this iſland Kichtak, as the original name of it; in which, however, he is miſtaken; for Kichtak, or Kightak, is merely an iſland; they call the Trinity Iſland Kightak Sichtunak; this, Kightak Kadiak; and, to my aſtoniſhment, one of them called Alakſa a Kightak, or iſland; and affirmed, that there were ſtraits three days' row to the north of Kadiak. I made it my buſineſs to aſcertain this, if poſſible; but had not an opportunity of learning any more, than that a river from a lake fell into the ſea weſt of Kadiak, and that they carried their boats over a low mountain to an inlet, which communicated with Briſtol Bay.

Bay. This was known to the Ruſſian hunters and ſeveral natives, who, in confirmation, ſaid, that they obtained the tuſks of the Walruſs, or Morzſh, from the oppoſite ſhore of Alakſa: their beſt ſpears were pointed with them.

The natives call themſelves Soo-oo-it, and their magicians Kanghémeut. I could not obtain any name from them for the Almighty; although they ſay, that there is a ſuperior being who has the command of all the ſpirits; and that the wrath of theſe ſpirits is only to be appeaſed by offerings, and in ſome caſes their ſlaves are ſacrificed, but very ſeldom; for all the priſoners that they take in their wars (which are almoſt perpetual, one tribe againſt another) become ſlaves, and are ſubject to ill treatment, particularly from the women. The female priſoners are all ſlaves, and ſold from one tribe to another for trinkets, inſtruments, &c. Not only their priſoners, however, are their labourers or ſlaves, but orphans become the property of thoſe who bring them up, and are frequently redeemed by the relations of the parents; eſpecially ſuch as were inhabitants of other iſlands.

The dwellings of the natives differ from thoſe of Oonalaſhka. They are but very little ſunk in the ground, and have a door fronting the eaſt, made of a framed ſeal ſkin; a fire-place in the middle; a hole over it, through the roof of the houſe, which ſerves at once for the diſcharge of ſmoke, and the admiſſion of light. The ſides, partitioned off for ſleeping and ſitting places, are covered with graſs mats, much coarſer made than thoſe of Oonalaſhka. Each hut, or dwelling, has a ſmall apartment attached to it, which ſerves for a vapour bath; ſtones are heated in the open air, and carried into theſe places, where the heat is increaſed

increaſed to any degree by the ſteam from water which is poured upon them.

The cuſtoms of theſe ſavages are nearly allied to thoſe of the Oonalaſhkans. They have the ſame kind of inſtruments, darts, and boats, or baidars; but much worſe made; nor are they ſo active upon the water. Their dances are proper tournaments, with a knife or lance in the right hand, and a rattle in the left; the rattle is made of a number of thin hoops, one in the other, covered with white feathers, and having the red bills of the ſea-parrot ſuſpended on very ſhort threads; which, being ſhaken, ſtrike together, and make a very conſiderable noiſe: their muſic is the tambourine, and their ſongs are warlike. They frequently are much hurt, but never loſe their temper in conſequence of it. In theſe dances they uſe maſks, or paint their faces very fantaſtically. The dances of the women are only jumping to and fro upon their toes, with a blown bladder in their hand, which they throw at any one whom they wiſh to relieve, and who always accepts the challenge.

The firſt character, is the athletic and ſkilful warrior; the ſecond, the fleet and expert hunter; the former enjoys his priſoners and the booty of his enemy; the latter has his wives, labourers, and ſlaves by purchaſe, and the ability that he poſſeſſes to maintain them. The moſt favoured of women is ſhe who has the greateſt number of children. The women ſeem very fond of their offspring; dreading the effects of war, and the dangers of the chaſe; ſome of them bring up their males in a very effeminate manner, and are happy to ſee them taken by the chiefs, to gratify their unnatural deſires. Such youths are dreſſed like women, and taught all their domeſtic duties.

There

Alexander del. R.H. Cromek Sculp.t

A Man of Kadiak

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There is no ceremony in marriage: the ability to ſupport women gives authority to take them, with their conſent; in which caſe, the couple are conducted by the relatives of the girl to the vapour bath, which is heated, and they are left together; but ſome preſent is generally made to the girl's father and mother. I inquired whether they lent their wives to one another? They told me, No; unleſs they were barren, and deſired it; if they then had a child, they became the property of its father.

No other ceremony is obſerved at births, than waſhing the child, and giving it a name.

The dead body of a chief is embalmed with moſs, and buried. The moſt confidential of his labourers are ſacrificed and buried with him; alſo his inſtruments of war or the chaſe, and ſome food. Numbers of the natives are baptized; but Delareff, the director of the Company, would not allow our prieſt to compel any to become Chriſtians; he, however, aſſiſted him in perſuading as many as he could. Such as were at the ſchool eſtabliſhed, willingly embraced the Greek religion, as did alſo numbers of the women.

The dreſſes of the natives are the ſame as at Oonalaſhka, but worſe made; they are open about the neck, and have but very few ornaments. They are extremely fond of blue beads and amber, and carry on a trade with the natives of the neighbourhood of Cook's River, where they purchaſe their baidars and canoes for trinkets, proviſions, and oils of whales and ſeals. They uſe darts and lances headed with ſlate, with which they kill the ſea animals. They alſo uſe poiſon to their arrows, and the Aconite is the drug adopted for this purpoſe. Selecting the roots of ſuch

plants as grow alone, theſe roots are dried and pounded, or grated; water is then poured upon them, and they are kept in a warm place till fermented: when in this ſtate, the men anoint the points of their arrows, or lances, which makes the wound that may be inflicted mortal.

They treat their viſitors, upon firſt entering their dwellings, with a cup of cold clean water. When they have reſted a while from the fatigue of rowing or walking, they put before them whale's fleſh, the meat of ſea lion, fiſh, berries mixed with oil, and boiled ſarana, alſo mixed with fiſh oil; and it is expected that the gueſt ſhall eat all that is ſet before him. In the meantime their bath is heated, and the gueſt is conducted into it, where he receives a bowl of the melted fat of ſeals or bears, to drink. The more the gueſt eats and drinks, the greater honour is done to the hoſt; but if he cannot eat all that is put before him, he muſt take the remains away with him.

They begin their chace in February on the ſouth ſide of Kadiak; for the kotic it continues all March; in April they depart from Kadiak to the neighbouring iſlands for ſea otters, which are in the greateſt perfection in April and May; alſo for ſeals, ſea lions, birds eggs, &c. The 1ſt of June whales and other fiſh are caught, ſarana gathered, &c. The firſt fiſh that appears is the halibut; then ſalmon, the ſame ſpecies as in Kamtſhatka. They continue this chace till the end of October, when they retire to their winter dwellings. November they ſpend in viſiting each other, feaſting in the manner of the Oonalaſhkans, and dancing with maſks and painted faces.

A voca-

A Vocabulary of their Language, as well as of the languages of the other nations that I have viſited, is given at the end of the Volume.

The birds that I obſerved hereabout were ſuch as I ſaw at Oonalaſhka, and about Shumagin's iſlands: wild geeſe*; different kinds of gulls; the creſted and tufted auk; blue pettrel, of a ruſty dark brown, very like the ſwallow; the fooliſh and black guillemot; divers, and a great variety of ducks: the fleſh of which are eaten by the natives, the ſkins uſed for dreſſes, and the bills, particularly of the ſea-parrot, employed for ornament.

Bears now and then appear upon the iſland of Kadiak, ſwimming acroſs the ſtraits that divide it from Alakſa five miles. The whiſtling marmots are numerous, as are alſo mice. Foxes, and ſtone-foxes, are ſcarce ſince the eſtabliſhment of the Ruſſians; in fact, theſe and the marmot are the only animals that the Ruſſians can kill; for they are not capable of chaſing the ſea animals, which requires particular agility in governing the ſmall leather canoes, in which the natives purſue the ſea-lion, the urſine-ſeal, ſea-otter, porpoiſes, and common ſeals.

The ſea-lion, called by the Ruſſians ſivootſha, is the ſtrongeſt and largeſt of the ſeal kind; covered with dark coloured coarſe hair, which is very thick and long about the neck and ſhoulders; the hind part is tapering, with ſmooth ſhort hair. The largeſt is about eight feet long. They copulate and paſs every night on

* Gooſe with a black bill; the upper mandible has a callous elevation. A triangular white ſpot runs from the throat along the cheeks on both ſides, to the hind part of the head. The bottom of the under part of the neck, vent feathers, belly, and coverts of the tail, white; breaſt, back, and wings duſky brown; legs a dull dark colour.

ſome rock by themſelves, one male and a number of females, driving away, or killing, every other ſpecies of animal that may approach them. The males have frequently very deſperate engagements, and the conqueror is immediately joined by all the females. They are extremely bold, and will attack men if diſturbed on the rocks. They have a ſmall white ſpot on the temples, nearly as large as a half-crown piece; and this is the only place about them vulnerable by arrows, which hardly pierce the ſkin in other parts; but, if poiſoned, they penetrate deep enough to infuſe the baneful quality. The meat of theſe animals is cut in thin ſhreds, and dried by the hunters, who eſteem it good eating. I thought it bad and fiſhy; but the head, which is equal in ſize to that of a large ox, I thought very good, if well ſtewed, and eaten with ſarana and other edible roots. The ſecond ſpecies is the kotic, or urſine-ſeal: the largeſt are about ſix feet long, covered with beautiful ſilvery grey hairs, of the colour of the Siberian ſquirrel, having a ſoft downy under fur, reſembling brown ſilk. The young kotic are extremely playful in the water; the head very nearly reſembles that of a lamb with long ears; and they live upon rock-weeds. The fleſh of the young ones is well taſted, but the colour is blue, and unpleaſant to the eye. Theſe ſwarm together in great herds on the low iſlands, and are killed by being ſtruck juſt above the noſe with a ſhort bludgeon. When they find themſelves in danger, they attempt to bite. When very young, the fur is of a beautiful ſhort gloſſy black, which changes to ſilvery when they grow up; and when they become very old, they are almoſt white.

The moſt valuable fur is that of the ſea otter, called by the hunters, and in Ruſſia, Morſkoi Bóbre. The fur of the young ones is rough and long, of a light brown colour (ſomething like the young cub of a bear), and is called Medvedka, the diminutive

of

of bear: this is of no value: the middling ſized are darker and valuable; theſe are diſtinguiſhed by the name of Koſhlok: but the moſt valuable are what is called the Matka, or mother; the largeſt are about five feet long, with a rich fur nearly black, interſperſed with longer hairs of a gloſſy white. The fur is upright, not inclining any particular way, from an inch to an inch and a half long. I had a young ſea otter dreſſed, and it taſted exactly like a ſucking pig. There are no more on the coaſt of Kamtſhatka; they are very ſeldom ſeen on the Aleutan iſlands; of late, they have forſaken the Shumagins; and I am inclined to think, from the value of the ſkin having cauſed ſuch devaſtation among them, and the purſuit after them being ſo keen, added to their local ſituation between the latitudes of 45° and 60°, that fifteen years hence there will hardly exiſt any more of this ſpecies.

Sea cows were very numerous about the coaſt of Kamtſhatka, and the Aleutan iſlands, at the time when they were firſt diſcovered; but the laſt of this ſpecies was killed in 1768 on Bering's iſland, and none have been ever ſeen ſince.

Whales are in amazing numbers about the ſtraits of the iſlands, and in the vicinity of Kadiak; the natives purſue them in their ſmall boats, and kill numbers with a poiſoned ſlate-pointed lance. Their melted fat is an article of great trade to the continent, being carried thither in bladders by the iſlanders; for which they obtain the land animals, boats, darts, ſlaves, &c.

I obſerved the ſame ſpecies of ſalmon here as at Ochotſk, and ſaw crabs; ſome ſhells of lobſters in the beach; cockles weighing a pound each, and a variety of other ſhell-fiſh. Theſe are the food of the ſea-otter.

The

The Halibuts in theſe ſeas are extremely large, ſome weighing ſeventeen poods, or ſix hundred and twelve pounds avoirdupois. The fins and tail are good eating; but the body of the fiſh is very coarſe and dry. The liver of this fiſh, as alſo of cod, the natives eſteem unhealthy, and never eat, but extract the oil from them.

The harbour in which the Ruſſians have their Eſtabliſhment is called Treeh Svatiteley. It is on the ſouth-weſt ſide of the Bay formed by a low ſpot of land running out from the ſide of one of the loftieſt mountains; and, taking a circular ſweep north and weſt, forms a harbour of about two miles in circumference, with ſoundings from eight to three fathom, over a bottom of mud. Near the dwellings, is a freſh water brook iſſuing out of the mountain; and at the bottom of it are their cook-houſes, and two inſignificant ſalt water lakes.

This iſland is ſubject to frequent earthquakes, which are ſometimes very violent. We obſerved high water at the new moon at 11° 45′, the riſe about eight feet. The variation of the compaſs 26° eaſt by the meridian line: the longitude of the harbour 205° 30′, latitude 57° 5′.

The natural productions of the iſland that fell under my view were, the elder in abundance; the low willow; ſome bruſh-wood, ginſeng, wild onions; the edible roots of Kamtſhatka; ſeveral ſpecies of berries, with currants and raſpberries in abundance, the latter white, but extremely large, being bigger than any mulberry that I have ever ſeen, but watery in taſte. Several of the natives had ſmall bunches of ſnake-root, which they obtained from Alakſa.

In

In the interior, they have good timber of common pine; and on the eaſtern point of the iſland, which Captain Cook called Cape Greville, they have a very conſiderable foreſt of pines, whence they bring the trees to build their huts here, and repair their veſſels.

CHAP.

CHAP. XIV.

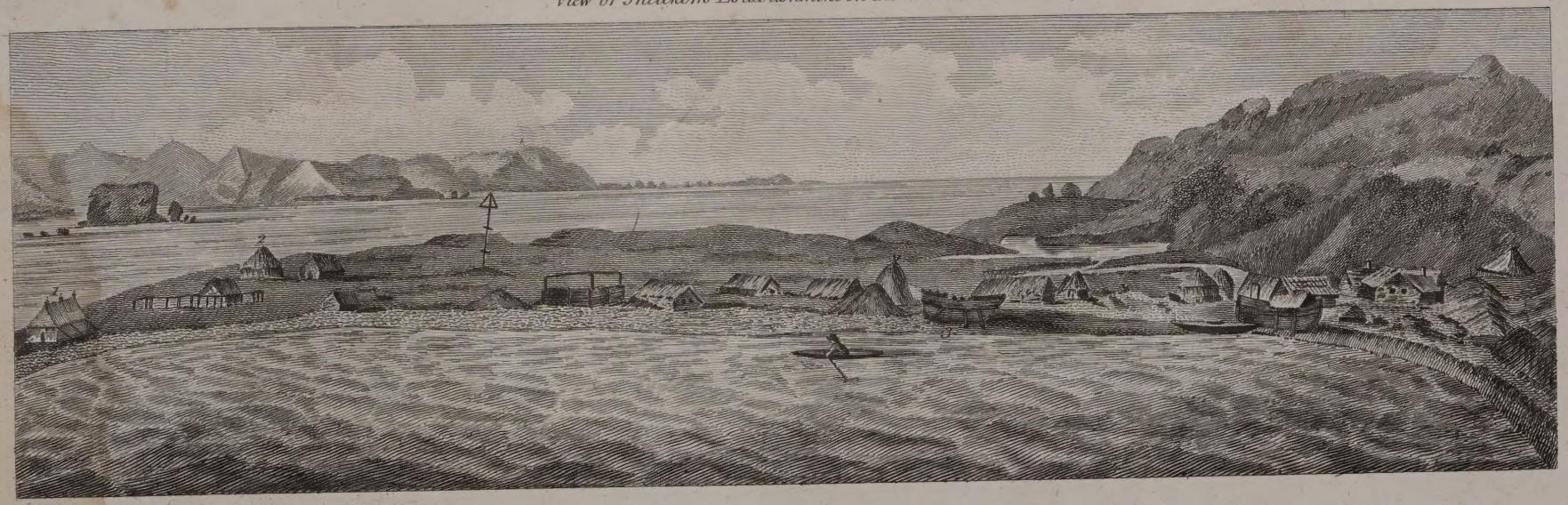
Leave Kadiak.—Iſland of Afognak.—Shuyuch, or Point Banks.—Icy River.—Fall in with a groupe of Iſlands, and are viſited by ſome of the Natives.—Anchor in Prince William's Sound.—Viſited by the Natives, whoſe propenſity to thieving is checked by the ſagacity of two Dogs.—Captain Billings aſſumes an additional rank.—Captain Saretſheff's Account of his Survey of the Coaſt.—Cape St. Elias aſcertained by an Extract from Mr. Steller's Journal.—Mr. Delareff's Account of a former Viſit to the Sound.—Some Reflections of the Author.

HAVING remained here at anchor until the 6th July, we took on board our aſtronomical tent, and the tent containing our travelling church, which were both erected on our arrival; and at five o'clock in the evening of that day, we hauled out of the harbour into the bay, and experienced as much difficulty in getting out, as we had before done in going in.

Mr. Delareff, the director of the Company, upon receiving intelligence that a Spaniſh frigate under the command of Captain Mendoza was at the entrance of Cook's river, acquainted us, and took his paſſage on board our ſhip. We were informed, that the Spaniards were in the habit of viſiting the ſettlements yearly, and that the Ruſſians obtained ſome proviſions, and a conſiderable quantity of ſea-otter ſkins from them, in exchange for hardware, beads, and linens.

It

View of Shelekoffs Establishment on the Island of Kadiak . .



1 Travelling Church.
2 Astronomical Tent.
3 Galliots hauld on shore.

The North extremity of the Island Tanaga bearing South distant 15 Miles.

Island of Atcha 22 June 1791 bearing S.E.

Published Feb. 23.d 1802, by Cadell & Davies Strand.

S. J. Neele Sculp. 352, Strand

Gores Island –

S.E. 48 30

– drawn while at Anchor in the Straits.

The Detached Island 4 Miles W by N from Gores Island

The Island Semi Sophosnoi as it appeared the 7 June 1792 bearing West dist 5 Miles.

Published Feb. 23.d 1802, by Cadell & Davies Strand.

S. J. Neele Sculp. 352, Strand

The Island Attoo bearing North distance 13 Miles.

The Island Agattoo bearing N.E.

The Island Buldyr bearing North distant 8 Miles.

The South east side of the Island Kyska.

Published Feb. 23d 1802, by Cadell & Davies Strand.

S. J. Neele Sculp. 352, Strand

It was Captain Billings's intention to viſit this ſhip. We had variable light airs from north to weſt, ſo that we made but little headway; and obſerved the whole of the ſouth-eaſt and eaſt ſhores of the iſland very lofty and broken, replete with inlets and bays; and numberleſs rocks cloſe in with the land. The 7th, at 5° 22′ 55″ P. M. our longitude 207° 47′ 45″, latitude 57° 25′ 40″, Yellovoi Muis, or Cape Greville, bore north-weſt.

The 8th, at day-break, we ſaw the iſland of Afognak, upon which the Ruſſians have an eſtabliſhment. This iſland is covered with fine timber inland. Its diſtance from the north extremity of Kadiak is ſeven miles. The ſtraits are replete with iſlands and rocks. Two miles north of Afognak is the iſland Shuyuch, ſurrounded with rocks, and about four miles in length. Its northern cape was ſeen by Cook, who named it Point Banks.

Contrary and baffling winds from the weſt and north-weſt prevented our weathering Cape St. Elizabeth. In the morning of the 11th we had rainy weather, but ſaw in the haze the land eaſt of the cape, which was much broken, and mountainous. At 10 o'clock a conical mountain on the continent bore north-weſt 22°. We obſerved a river, which the hunters call Ledenaia Reka (Icy River), from its being continually frozen, and which ſerves them for a direction into the Sound. It bore north-weſt, diſtant about 15 miles, and is ſituated in latitude 59° 36′, longitude 209° 45′ eaſt. Near the mouth of this river are a groupe of iſlands, and numerous detached rocks. We had variable light airs from the ſouth-eaſt to north-eaſt, with calms, and foggy and miſty weather, which hid the land till Friday the 12th at two P. M. when we again ſaw land about 15 miles ahead. Our courſe was north north-weſt, with light airs from the north-eaſt. Obſerving ſe-

veral openings, and Delareff aſſuring us that there were no ſunken rocks, but good anchorage in the bays, we ſtood in, and got among a variety of ſmall iſlands. When we were at about three miles from ſhore, two of the natives came off in their canoes, making the general ſign of peace, by expanding their arms; we repeated their ſignal, and hoiſted a flag, upon which they came on board, bringing with them the ſkin of a young ſea-otter, a river-otter, and a ſeal; for which they received tobacco and beads. They ſtayed but a ſhort time on board; and Delareff went on ſhore in his three-ſeated baidar, which he brought with him, and two Americans, accompanied by the natives who had viſited us; he not ſeeing any probability of getting with the ſhip to Cook's river. Though quite unarmed, he did not apprehend any danger; a plain proof that his company had the complete friendſhip of the natives. We deſired him to acquaint the Spaniards, that we wiſhed much to ſee them, and ſhould continue ſometime in Prince William's Sound. He gave us a young American, who underſtood the Ruſſian language, for our interpreter. This young man ſpoke with the two natives, who ſaid, that almoſt all the land which we ſaw was iſlands, which produce very fine timber to the water's edge. Our latitude was now 59° 15′; and, though we were not above three miles from the neareſt land, quite embayed, we got no ſoundings with 100 fathom line. We obſerved the current ſetting to the weſtward at two knots and a half. Variable light airs between ſouth and eaſt continued, with calms all day. The 13th, at 4° 4′ 25″ P.M., our longitude was 209° 15′, latitude 59° 17′ 45″. Baffling winds continued till the morning of the 16th, when a moderate breeze ſprung up from the ſouth-eaſt. Our courſe was north-eaſt, at about five knots, with a heavy ſea and rainy weather. In the afternoon we had again little wind. In the morning of the 17th, at four o'clock,

we ſaw Montague iſland (called by the natives Tſukli) bearing north 5° eaſt, diſtant about ſeven leagues. At 8° 36′ 25″ A. M. our longitude was 211° 13′, latitude 59° 43′ 38″. We ſtood away to the eaſtward of the iſland, to get into Prince William's Sound, which we accompliſhed on the 19th at four P. M., and brought up near the place where Captain Cook lay at anchor in 1778.

In the morning of the 20th July, we ſent our obſervatory, with all the apparatus, on ſhore, and were viſited by numbers of the natives, who were at firſt very ſhy; rowed about the ſhip holding up their hands with bear-ſkin gloves on; ſinging, and making ſigns of friendſhip. On being aſſured of friendly treatment, they ſoon came on board, and manifeſted a ſtrong inclination to ſteal iron articles. They complained bitterly of the ill treatment that they had received from a Ruſſian veſſel under the command of Sturman Polutoff. Theſe Ruſſians had taken their ſea-otter and other ſkins from them without making any returns; wantonly ſhot ſome of their people, and carried ſeveral of their women away by force.

They ſeemed perfectly ſatisfied with the treatment and ſome preſents which they received on board, and left us with a promiſe of returning with ſome ſkins. However, they made ſhift to take with them every thing that lay about careleſsly, and the iron tiller of the boat along-ſide.

We kept a ſtrong guard on board, and alſo at the obſervatory, to prevent our being ſurpriſed; for the natives appeared reſolute enough to undertake any thing.

A number of them viſited Captain Billings in his tent on ſhore, and he treated them with tea; of which, however, they did not ſeem very fond, nor of brandy, nor tobacco; for theſe articles had not yet been introduced among them, or taſted, except by a very few who had been on board the Ruſſian veſſels; but they were all fond of ſugar.

A water ſpaniel that Captain Billings had with him did not ſeem to like the appearance of theſe ſavages; however, he lay ſtill in the middle of the tent. The cabin-boy had careleſsly placed the tea-board ſo, that part of it, with ſpoons, &c. was ſeen on the outſide of the tent. One of the natives attempted to appropriate the ſpoons to himſelf; this no one obſerved but the dog, who ſprang up, leaped over the natives in the tent, ſeized the thief by the hand with the ſpoons in it, and held him faſt till the Captain told him to let go: a circumſtance which, I believe, kept them honeſt afterwards in the dog's preſence. Captain Hall had a pointer on board, which did the ſame ſervice there. The natives wiſhed very much to poſſeſs theſe dogs, and one of them deſired Captain Hall to ſell him half of his; which induced me to think that they wanted to eat them, or ſuppoſed that they were kept to be eaten by us.

Captain Billings, being now arrived at the place which *he ſuppoſed* to be Cape Saint Elias, diſcovered by Captain Bering in 1741, aſſumed an additional rank, conformable to the mandate of Her Imperial Majeſty, and took the oath adminiſtered by our prieſt, according to the rules of the ſervice. This was upon Saint Elias's day.

Two

Two men and a woman had accompanied us from the iſland of Oonalaſhka, by their own deſire, to ſerve as interpreters. Their chief view was, to get out of the way of the Ruſſian hunters now on their iſland; and Captain Billings promiſed to leave them at home on his return, when they thought the hunters would be gone. They had brought their ſmall canoes, or baidars, with them. I was the only perſon on board, except the Aleutes, that could venture out in theſe boats; and the 22d, being a fine day, with light airs and calms, I took a ſmall excurſion merely for exerciſe, quite alone; but received Captain Hall's injunctions (Captain Billings being at the obſervatory) not to go on ſhore, nor venture to any great diſtance. I left the ſhip at one o'clock, and paddled with the tide at the rate of about eight miles in the hour, without paying any attention to the diſtance. On attempting to return, I found the tide too ſtrong againſt me. I did not ſee a ſingle native any where, nor any traces of them, and reſolved to enter a ſmall cove to wait the return of tide, and to get a draught of freſh water from a brook that I obſerved. After entering a ſmall inlet, I diſcovered that my retreat was cut off by ſome of the natives. My dreſs was a nankeen jacket and trowſers; and I had a few claſp knives and beads in my pocket, which I gave the natives; particularly a woman whom I obſerved amongſt them in a nankeen camley, and who addreſſed me, to my aſtoniſhment, in the Ruſſian language; which rather increaſed the uneaſy ſituation that I found myſelf in, on account of the complaints that they had made, on board, of Polutoff's company. I found, however, no great difficulty in perſuading her that I was not a Ruſſian. She gave me a bowl of water, and treated me with berries upon which the oil of ſeals had been poured. She told me, that Polutoff had taken her away by force, and kept her above a year, till ſhe had learned the Ruſſian language. After that,

that, ſhe aſſociated with Zaikoff, and returned to the Sound, making herſelf their interpreter. She ſaid, that Zaikoff, who was a very good man, and behaved well to every body, had favoured her eſcape, and that they had been well revenged upon Polutoff and his crew; for that a boat from each of the veſſels had been on ſhore to cut wood, and had pitched two tents (one for each company) at a ſmall diſtance from each other. It was in the autumn; the night was dark; and only one man watched at a fire ſide, ſitting on the beach. The natives crawled, unheard, cloſe to the watch at Polutoff's tent, killed him, and, ruſhing into the tent, murdered every ſoul there, without moleſting Zaikoff's tent, or any of his people.

She invited me to their dwelling, and aſſured me that I ſhould be ſafe. I aſked her how far it was. She ſaid, that if I left the ſhip at ſun-riſe I ſhould arrive at her dwelling before ſun-ſet; that the habitation was acroſs the ſtraits at the end of the Sound (pointing to the eaſtward of the north), near the diſcharge of a large river. This induced me to aſk her, if the land about us conſtituted any part of the continent. After ſome converſation between her and the chief, ſhe told me, that the openings were all ſtraits. I promiſed that I would go with her if they would come on board in the morning for me, and that I would give them beads and other trinkets. At half paſt three it was high water, and I put off, very well pleaſed to get away; for they all admired my baidar ſo much, that I was much afraid of loſing it, and my ſenſations, when I firſt diſcovered myſelf in their power, were very unpleaſant. I arrived on board at half paſt four, and relieved Captain Hall of his anxiety on my account, but forbore relating my adventure, leſt it ſhould prevent my future excurſions,

ſions, which I promiſed myſelf ſhould not lead me into ſuch danger a ſecond time.

Early in the morning of the 23d the woman came alongſide, with about ten double canoes, and brought a ſea-otter ſkin, which I took for a few beads. They aſked me to accompany them, and the chief would remain in the ſhip till I came back; but Captain Billings would not agree to it. Neither Captain Hall nor Saretſheff ſaw any reaſon for objecting to this trip, eſpecially as the chief offered to ſtay on board as hoſtage for my return. Captain Billings at this time had the woman and chief in his cabin, out of which they returned in great haſte, and in ſeeming rage left the ſhip. I was extremely ſorry, as it deprived me of the hopes of getting ſuch information as I wiſhed to obtain concerning the ſtraits, and particularly the large river that ſhe ſpoke of. They rowed to the obſervatory, and took a caſque from the head of one of our grenadiers, with which they attempted to run away, but returned it on being overtaken.

They, indeed, ſhewed an aſtoniſhing propenſity to thieving, even of ſuch things as could not have been of any ſervice to them; and, upon being detected, returned the articles with amazing compoſure. Their language and manners differ but very little from thoſe of the iſlanders at Kadiak.

Towards evening of the 24th July, Captain Saretſheff went with the long-boat armed, to ſurvey the Sound, to examine the dwellings of the natives, and to diſcover whether the land was any part of the continent, or merely iſlands. He returned in the afternoon of the 27th, and gave the following account of his excurſion.

"I went

" I went north about eleven miles and a half, where the coaſt " trends eaſtward. Here ſix Americans, in four baidars, over- " took us, and ſaid that they wanted to conduct or accompany " us. In the evening, when we halted for the night in a ſmall " bight (not ſo far as they wiſhed us to go), they left us. Here " we ſaw a croſs affixed *. The next day we proceeded; and " at the diſtance of ſixteen miles and a half the land trended " away to the ſouth-eaſt, into what appeared to us a very exten- " ſive bay. On account of foggy weather, we could not well " diſcern the oppoſite ſhore, which, however, appeared at times, " and ſeemed rather low land. At eighteen miles the ſhores led " to the north-eaſt. Here we again ſaw the natives in eight " baidars. They ſaid that they had been on the chaſe out at ſea, " and that we were in the ſtraits; but adviſed us not to continue " our courſe much farther, as it was very ſhallow, and the " breakers were ſo violent that they found great difficulty in " paſſing in their ſmall canoes; adding, that the place was quite " dry at low water. They ſaid, that the oppoſite ſhore was like- " wiſe a large iſland, and that the ſtraits were alſo ſhallow and " nearly dry at low water. The oppoſite ſhore was not to be " ſeen on account of the fog. We proceeded, in all, twenty- " three miles. The fog clearing up a little, diſcovered both " ſhores and the ſea. The cape on the right hand was about " two miles diſtant. The left ſhore trended to the north-eaſt. " At a little diſtance from ſhore were two ſmall iſlands, and a de- " tached high rock. We croſſed the ſtraits backwards and for- " wards in returning, with ſoundings from one and a half to two " and a half fathoms, ſand. It was high water; and, that the

* I am inclined to think that it was erected by Zaikoff, or Polutoff, in conſequence of their people being buried here.

" boat

" boat ſhould not be left dry, we proceeded back at ſeven o'clock " in the evening, and paſſed the night of the 26th in a ſmall " bight about ſix miles from the ſhip. Here we found a few na- " tives in their ſummer habitations for the ſake of the chaſe, " who received us in a very friendly manner, aſſuring us that " they had no bad intentions, becauſe we behaved well to them, " and not like ſome viſitors who had been before us. I told " them, that thoſe who treated them ill were not government " ſhips; and that whenever they ſaw a ſhip with ſuch a flag as " ours, they might go on board with great ſafety." (* Signed G. Saretſheff, and dated 27th July 1790.)

He did not like the appearance of ſome of the natives, and kept a very good look out, to prevent his being ſurpriſed.

On the 28th, I made a little excurſion in the long-boat well armed, with the naturaliſt and drawing-maſter, and returned the next day without ſeeing any of the natives, or meeting with any circumſtance worth relating. An old man came aboard on the 29th, who ſeemed very good natured and intelligent. Mr. Saretſheff and I entered into converſation with him through our American interpreter, and aſked him, how long it was ſince the firſt ſhips made their appearance among them; and whether he remembered any boats having been loſt? He anſwered, that ſeveral boats had been loſt, which, by his account, we thought to have been Spaniards. He ſaid, that they frequented (on the chaſe in

* I think it neceſſary to notice, that upon Mr. Saretſheff's arrival in Kamtſhatka he diſcovered that his interpreter knew that the natives wanted him to go up the bay, that his boat might be left dry, when they meant to attack him and murder all his people. Upon Mr. Saretſheff's aſking this interpreter why he did not mention it at the time, he ſaid, " I " ſhould have been ſafe had you been murdered; but, had I diſcovered their plan, I ſhould " certainly have been killed."

ſummer) an iſland, which he deſcribed ſo particularly, as convinced us beyond a doubt, that it was the Kay's iſland of Captain Cook. He remembered, that when he was a boy, a ſhip had been cloſe into the bay on the weſt ſide of the iſland, and had ſent a boat on ſhore; but on its approaching land the natives all ran away. When the ſhip ſailed, they returned to their hut, and found in their ſubterraneous ſtore-room, ſome glaſs beads, leaves (tobacco), an iron kettle, and ſomething elſe. This perfectly anſwers to Steller's * account of the Cape Saint Elias of Bering, and

* The following is a tranſlation of this part of Mr. Steller's journal, which he kept in the German language.

" We ſaw land the 15th July; but, as it did not appear diſtinct enough to make a drawing of it, it was, on account of my having ſeen it firſt, ſaid to be a miſtake; but the next day it appeared beyond a doubt. The land was high, and an interior mountain was very plainly diſcernible ſixteen German miles out at ſea. I have never ſeen, in all Siberia or Kamtſhatka, a more lofty mountain. The ſhore was broken every where, and diſcovered numbers of inlets and harbours. Every perſon congratulated the commander on the diſcovery; which congratulations he received not only with aſtoniſhing indifference, but even ſhrugged up his ſhoulders, and ſaid to Mr. Pliniſner, " We imagine that we have found " every thing, and numbers are grown big with airy projects. Nobody conſiders *where* we " have found land, the diſtance that we have to run back, or what may happen: per- " haps paſſage-winds may prevent our return. We know not this land, nor have we ſuffi- " cient proviſion to paſs a winter."

" The 17th, on account of little wind, we advanced ſlowly. The 18th, towards evening, we came ſo cloſe as enabled us to ſee plainly the beautiful foreſts that approached to the water's edge. The ſhore was even, and appeared ſandy. We kept the continent on the right hand, ſailing a north-weſterly courſe to get behind an iſland conſiſting of a high mountain covered with wood, which was only to be done by plying to windward.

" The 19th we were two German miles off the north-weſt extremity of the iſland. We had obſerved, the day before, ſtraits between it and the continent; and I thought that ſome conſiderable river emptied itſelf in the vicinity. My reaſons were,—the current two miles out at ſea; and the difference in the colour of the water, which was alſo freſher.

" I mentioned my conjectures, but they were laughed at. The whole of this day we employed in plying to windward, to get cloſe to the iſland into the inlet that we had obſerved the

and is undoubtedly the very ſpot where Steller landed, and where the things above mentioned were left in the cellar. Thus it is very plain, that Cape Saint Elias is not the ſouthern point of Montague iſland, but Kay's iſland. This native farther told us, that at the north extremity of Kay's iſland, there was a bay ſheltered from the wind; that the entrance at low water was as deep as his double paddle (which is about ſeven foot); and that there are runs of freſh water into it, but no great rivers. A very conſiderable river, however, falls into the ſea a day's journey north of our anchorage, up which the natives travel 14 days to the reſidence of a different nation, the people of which ſupply them with knives, copper kettles, and inſtruments, and make their canoes.

the day before. The 20th we came to anchor between iſlands; and, in compliment to the day, named the extremity of the large iſland Cape Saint Elias," &c.

Chytroff, the maſter, was ſent on ſhore to ſurvey, and Mr. Steller accompanied him to make his obſervations on ſhore on the "three kingdoms of nature."

He ſaw the traces of inhabitants, and diſcovered one of their cellars, into which he entered. It contained,

1. Lukoſhkan. Theſe are a kind of box of the bark of trees, about two yards high, containing ſmoke-dried ſalmon.

2. A quantity of the ſweet plant of Kamtſhatka, but cleaned and prepared in a better manner.

3. Several ſpecies of graſs, cleaned like hemp: I took them for nettles, which grow here in abundance; perhaps uſed, as in Kamtſhatka, for fiſhing-nets.

4. The dried inner bark of larch and fir in rolls, ſuch as I have ſeen in Kamtſhatka, through all Siberia, and even in ſome parts of Ruſſia; and which is eaten in caſe of need.

5. Large packs of thongs of ſea-weeds, of great ſtrength.

Beſides a few arrows made like thoſe of the Tartars and Tungooſe; blacked, and wrought ſo ſmooth, that I apprehend they have iron inſtruments.

He carried with him on board two bundles of fiſh; an arrow; a wooden inſtrument for making fire, reſembling that uſed formerly by the Kamtſhadals, with tinder made of dried leaves; a bundle of the wood; ſome bark, and ſome of the graſs.

Sailors were afterwards ſent to leave an iron kettle; a pound of tobacco; a Chineſe tobacco pipe, and a piece of Chineſe ſilk; in return, they nearly plundered the cellar.

That theſe people trade with others farther inland, and obtain from them knives and other articles; but that his nation never go farther than 14 days' journey. That the articles of their trade are, the ſkins of ſea-lions, for boats; oil of ſea animals; ſmall ſhells; and muſcle-ſhells for points to arrows; and that theſe were a very powerful and warlike people.

Another obſervation of his, I think it very neceſſary to mention: it was a poſitive aſſertion, that there were ſtraits and iſlands as far as we could ſee; and that to the ſouth-eaſt there was "A GREAT SALT WATER," with many entrances to it. I repeatedly aſked the queſtion, and could not be miſtaken in the anſwer; and I would moſt willingly have ſtayed on the coaſt alone, to explore theſe unknown parts from tribe to tribe, until I had loſt myſelf, or found my way to Europe through ſome of theſe cranny paſſages. I am aware, that I was thought a madman for it; but this madneſs, this enthuſiaſtic confidence, would, I am certain, have aſſiſted my ſucceſs; nor would I have left unexplored a river of which we had ſuch confirmed accounts, without good reaſon for it; for I never met with any men that would refuſe aſſiſtance to one individual, who, without the means of being their enemy, was at all times in their power. Over and above all this, I declare, that I have complete confidence in a Supreme Being, who governs every thought, and inſpires means of expreſſion to ſecure the devotee in exploring his wiſdom.

I hope that my rhapſodies will not offend my readers: they are notes penned at the inſtant when my feelings were moſt acute, and with a view of making them known to the public on a future day.

Captain

Captain Billings had received intelligence of this river from Mr. Delareff, the director of Shelikoff's companies at Kadiak, Afognak, and Cook's River; who gave the natives the character of good people; and ſaid, that they ate, drank, and ſlept together in the moſt friendly manner; and I firmly believe what he ſaid*.

We took in a number of fine ſpars, with a ſupply of water, and caught with our net in-ſhore ſome ſalmon, beſide taking ſome flat fiſh by angling over the ſhip's ſide. Having hauled up a large ſkate while the natives were about the ſhip in their boats, as many

* I think it neceſſary to communicate the following intelligence of this Gentleman *verbatim*.

"I ſailed from Ochotſk in the month of July 1781; arrived the 10th Auguſt at Commandorſki (Bering's) Iſland, where I wintered. The ſecond winter I paſſed at Oonalaſhka; and the winter of 1783 at Prince William's Sound. I arrived on the 13th Auguſt in the offings before ſun-riſe, and ſent out a boat well manned to ſeek a convenient harbour. The weather became thick and hazy; but when it cleared up I diſcovered a number of boats making to the veſſel. The largeſt among them hoiſted a flag; I did the ſame; they then rowed three times round the veſſel, one man ſtanding in the middle, ſinging, and waving his hands. Upon being invited they came aboard, and I obtained fourteen ſea-otter ſkins for glaſs beads, chiefly blue. I offered them ſhirts and clothes, which they did not ſeem to want; and tobacco they rejected. They behaved in a very friendly manner. We were quite off our guard, and ate, drank, and ſlept together in the greateſt harmony. They informed us, that two ſhips had been there ſome years back, and gave them great ſtore of beads and other articles. By their deſcription, theſe veſſels muſt have been Engliſh. They had knives and copper kettles, which they ſaid they obtained up a great river, about 14 days journey againſt the ſtream, where the natives were numerous, and had great quantities of copper.

"On the 8th September there ſeemed ſome alteration in their appearance, and they ſuddenly commenced a violent attack upon my people. I knew no cauſe, until the 21ſt, when the boat ſent upon my arrival returned, and I found that there had been quarrelling and fighting between the boat's crew and the natives. I could never find out the origin of the diſpute; but really think that my own people had been the aggreſſors; perhaps for the ſake of a few ſkins. Polutoff's veſſel was at that time in the Sound, and I left them there."

as could get at it ſtabbed it with their ſpears with great eagerneſs, and called it the devil.

Raſpberries were in great plenty, white, extremely large, and fine flavoured. Cranberries and ſeveral other ſpecies of berries we obſerved, with plenty of ginſeng, and ſome ſnake-root. The timber compriſed a variety of pines of an immenſe thickneſs and height; ſome extremely tough and fibrous, and of theſe we made our beſt oars.

The natives wore the ſame habits as thoſe of Kadiak; they poſſeſs the ſame cuſtoms, and the languages differ very little. They had evidently a knowledge of ſeveral European words; for if they were not ſatisfied with returns made in barter for their articles, they exclaimed, *No! no! no! no!* holding their hands for more; and if more was required from them than they inclined to part with, they ſhook their heads and ſaid, *Plenty, plenty.* They obſerved the expreſſion of our countenances very minutely; and if they ſaw any thing reſembling anger, they immediately laid down their articles in their boats, held up their hands, and exclaimed, Amigo, Amigo! and La-lee, La-lee! which they underſtood to ſignify friendſhip and peace. Their inſtruments differ only in this particular, that many of them are pointed with copper, and one of them had an European bayonet on the end of his ſpear. They have very large ſcreens; I was told, (but ſaw none) of ſufficient ſtrength and thickneſs to withſtand a muſket-ball, and large enough to ſhelter twenty or thirty men. They have armour of wood, which covers the body of the warrior and his neck; but his arms and legs are expoſed. This is made of very neat pieces of wood, about half an inch thick, and near an

inch

inch broad, tied very artfully together with fine threads of the ſinews of animals; and ſo contrived, that they can roll it up or expand it. This they tie round the body, a flap before reaching down their thighs; but ſo made as to riſe or fall, and permit their ſitting in baidars: a ſimilar flap hangs on the breaſt, which may be riſen as high as their eyes. Straps faſten this armour on their ſhoulders, and ſtrings tie it round the body on one ſide.

The head is well guarded with a wooden helmet; ſome of theſe are made to reſemble the head of a bear, and cover the face completely. Such wooden caps, or head-pieces, are worn in the chaſe of the different animals which they repreſent; the native clothes himſelf in their ſkins, and approaches within a convenient diſtance to uſe his bow or lance. Some of the natives were preſented with copper medals and beads.

Our obſervations proved the longitude 213° 42′ 45″, latitude 60° 18′ 48″, at the obſervatory on ſhore, about 50 fathom ſouth of the ſhip at anchor.

CHAP.

CHAP. XV.

Leave Prince William's Sound.—It is reſolved to return to Kamtſhatka.—Kay's Iſland.—One of the Aleutes taken on board from Oonalaſhka makes an attempt on his life.—Extraordinary difference in Longitude between the Time-keeper and the Ship's reckoning.—Short Allowance enforced.—Arrive in the Harbour of St. Peter and St. Paul.

We remained in this ſtation till the 30th July 1790, at ſix A. M. when we ſet ſail, having hauled out of the bay with a gentle north-weſt wind, ſhaping our courſe ſouth and ſouth-eaſt. At noon the north extremity of Montague iſland (called Tſukli by the natives) bore by true compaſs north-weſt 40°, diſtance ſeven miles. From this point, latitude 60° 16′, longitude 213° 3′, we took our departure. Variation of the compaſs 28° 30′ eaſt.

In the morning of the 31ſt July we ſaw Kay's iſland, and the detached rock off its ſouth extremity. At 1° 26′ 47″ double altitudes made the latitude 59° 51′ 22″, when Kay's iſland bore north-eaſt, diſtance about eight miles. At four we ſaw plainly Mount Saint Elias bearing north-eaſt 49°. At five P. M., longitude, by time-keeper, 215° 42′ 45″, latitude 59° 44′ 22″, variation of the compaſs 26° eaſt. The weather ſoon after grew hazy, and we ſaw no more of the land. The wind ſhifting to the eaſt and north-eaſt, we kept all the 1ſt of Auguſt a ſouthern courſe; taking into conſideration our ſmall ſtock of proviſions, which precluded

cluded every thought of paſſing the winter where we could not be ſure of procuring a ſupply; together with the lateneſs of the ſeaſon, and the diſtance that we had to run back to Kamtſhatka; beſides, it was thought neceſſary to have a ſecond veſſel, for ſecurity's ſake, in ſo uncertain a navigation, where none of the iſlands, except Oonalaſhka, were laid down with any ſort of exactneſs even on the beſt of charts. Our return, therefore, to Kamtſhatka was neceſſary to forward the buſineſs of building the veſſel. It was alſo conſidered as a principal object of the expedition, to obtain ſome more perfect information concerning Cook's River, and other rivers and parts of the continent ſouth of it, as well as to ſurvey all the chain of iſlands between America and Kamtſhatka, and aſcertain by aſtronomical obſervations their true ſituation. To effect which, the whole of the next ſummer and winter might be employed, and the ſummer following appropriated to explore the more northern parts to the utmoſt extent of poſſibility.

This was agreed to, and our return determined upon immediately; intending, however, to ſtop at Oonalaſhka for water, and to put on ſhore the natives who had accompanied us.

I believe that I was the only perſon on board who felt any regret at the thoughts of returning to Kamtſhatka. I really imagined that we ſhould never ſee this coaſt again; and I had now acquired knowledge enough to ſurvey any place, from Mr. Saretſheff's intelligent manner of explaining whatever appeared to me difficult. This, added to a few leſſons that I took from Mr. Batakoff, our maſter, would have enabled me to be pretty exact; a conſideration which made me offer to go on ſhore alone, and meet Captain Billings the enſuing ſummer at any part of the coaſt that he would appoint. The attempt might have been raſh: I do not,

however, think (as I before obſerved) that one perſon runs any riſk either of ſtarving, or being murdered, but may depend upon ſure conveyance from one tribe to another. I do not mean to infer that there was any impropriety in rejecting my offer, for it was regarded as ſacrificing myſelf to no purpoſe.

Kay's iſland, the laſt that we ſaw to diſtinguiſh as ſuch, (the ſouthern point of which moſt aſſuredly forms the Cape Saint Elias of Commodore Bering,) is very remarkable. It is of moderate height, except the ſouth extremity, which is conſiderably elevated above the reſt, and terminates very abruptly a barren mountain of a ſaddle-form and white. A detached rock of the ſame kind of ſtone is ſituated a few fathoms off the point; eaſt of which, at the diſtance of one mile and a half, are ſunken rocks. The other part of the iſland conſiſts of hills and vallies, apparently well wooded with fine pines. From the ſouthern point, the iſland trends north 46° eaſt, twelve miles in a ſtrait line, and is two miles and a half acroſs in the wideſt place. To the weſt of the northern extremity is another iſland, with ſeveral ſmaller iſles nearer the continent; forming a well ſheltered bay over a bar of about ſeven feet at low water, with a rivulet at its head. The direction of Mount Saint Elias from Kay's iſland is eaſt north-eaſt. It towers to an immenſe height, and is covered with ſnow. Its diſtance I compute at about 30 leagues.

If I may be allowed to hazard a conjecture of my own concerning the land that we ſaw, it is, that I do not think any one place, except Mount Saint Elias, conſtitutes any part of the continent; not even Cape Elizabeth; and I have my doubts of Alakſa itſelf. I think that the whole is formed of a cloſe connected chain of iſlands, ſeparated by ſtraits from the main land. I ob-

ſerved no change in the colour of the water, however cloſe in with ſhore; which muſt have been the caſe had any conſiderable rivers fallen into it; but we ſaw none, and our enquiries do not juſtify the ſuppoſition that rivers exiſt, except beyond the ſtraits; for the rivers were ſpoken of by the natives as lying behind the iſlands. I could not perceive any alteration in the taſte of the water, not even where we were at anchor, and it was exceedingly pellucid.

However, I ſhall take leave of this coaſt, and proceed to give an account of our return. No ſooner was this reſolved upon, than the wind ſhifted from north-eaſt to weſt and ſouth-weſt. We kept a courſe as much to the weſt of the ſouth as poſſible; and on the 4th, at eight P. M. our time-keeper gave the longitude 215°, latitude 56° 53′, variation 27° 50′. On the 6th, we ſaw ſeveral land birds and floating wood, our latitude 55° 15′, longitude 214° 15′, variation 26° 10′ eaſt. We had a briſk gale at ſouth-weſt, ſteering ſouth ſouth-weſt, one half weſt, the ſea running very high, ſucceeded by calms and variable light airs: all the 9th we had a favourable breeze from the ſouth ſouth-eaſt, with rainy and miſty weather. We made a good run weſt ſouth-weſt. On the 10th, calms and baffling winds. At 4° 10′ 25″ P. M. apparent time, our longitude by time-keeper was 210° 9′ 15″, latitude 54° 29′ 17″. The ſhip's reckoning made us one degree more weſt; but the latitude was within two miles. The difference of longitude increaſing every obſervation induced Captain Billings to doubt the rate of going of the time-piece. On our paſſage out, the ſhip's reckoning and our obſervations agreed ſo well, that he could not by any other means account for the difference. On the 14th, the amplitude of the ſetting ſun gave the variation 23° 12′ eaſt. The 15th, at nine A. M. longitude

by time-keeper 201° 49′ 30″, latitude 54° 15′ 6″, by ſhip's reckoning longitude 200° 47′, latitude 54° 11′. Miſty weather prevented our obſerving again till the 26th Auguſt, at 9° 10′ 45″ A. M. when the time-keeper gave the longitude 194° 21′ 15″, ſhip's reckoning 190° 20′ eaſt. At noon, our obſerved latitude was 52° 22′ 16″, by ſhip's reckoning 52° 14′. In the evening of the 26th, we encountered a hard gale of wind from weſt ſouth-weſt, and laid-to under fore, main, and mizen ſails. The gale continued till the 28th, at five P. M. when, it abating a little, we ſet our cloſe-reefed top-ſails. At noon we got an imperfect view of the ſun, which gave the latitude 52° 13′ 2″, variable light airs, cloudy: at times rain. Suppoſing ourſelves about the meridian of Oonalaſhka, having but a ſcanty ſupply of water on board, and the natives wiſhing to be at home, we ſtood to the north for this iſland, with rainy and foggy weather, which grew ſo thick that we could not ſee half a mile a-head; and reaching the latitude of 52° 59′ by account, without ſeeing land, at the ſame time a briſk gale ſpringing up from the ſouth by eaſt, it was reſolved upon to proſecute our voyage to Kamtſhatka, and keep the natives till the next ſpring. The uſe of freſh water was now prohibited, except where abſolutely neceſſary: foggy, miſty, and rainy weather continued. The 30th, at ſix P. M. we thought we ſaw land weſt north-weſt, but the fog hid it before we could poſſibly aſcertain whether it was ſo or not: however, we ſtood away to ſouth all night. Our latitude was by account 53°, longitude 191° 25′.

On Sunday, the 1ſt of September, we had a briſk gale from the weſt north-weſt, ſteering ſouth-weſt. During the night, and particularly this morning at eight o'clock, the ſea running very high, and the ſhip in great motion, we experienced a violent ſhaking and trembling of the veſſel, as if her keel were rubbing againſt

againſt an uneven bottom; it laſted ſeveral ſeconds, and we ſuppoſed it to have been cauſed by an earthquake. At noon the altitude 41° 2′ 30″, proved our latitude 52° 59′ 46″, which, by our ſhip's reckoning, was only 52° 23′. The 3d, at 8° 35′ 25″ A. M. our time-keeper gave the longitude 195° 10′, latitude 51° 10′ 33″; our reckoning, longitude 189° 50′, latitude 51° 29′. At noon, our obſerved latitude was 51° 9′ 33″.

Notwithſtanding Captain Billings doubted very much the regularity of his time-keeper, he never miſſed an opportunity of aſcertaining the longitude with it; yet he placed the greater confidence in the ſhip's reckoning. I was quite of a contrary opinion, confirmed by the difference exiſting in the reckoning of Commodore Bering in 1741, which was near 12 degrees ahead of Bering's iſland at the time when the ſhip was wrecked upon it. The 4th September, at noon, a ſudden ſquall carried away our fore-maſt a little below the cap; the top-maſt, in falling, alſo broke. The wind was ſo heavy, as to bring our ſhip's lee-gunwale under water; but on the maſt's breaking ſhe righted; a hard gale from the weſt immediately followed, and we brought-to under mizen and main-ſail till ſeven o'clock the next morning. At 8° 44′ 15″, our longitude by time-keeper was 192° 44′, latitude 50° 36′ 7″, variation 17° 35′ eaſt, making a difference of the ſhip's reckoned longitude of five degrees. She being ſo much a-head, which, of courſe, induced us to keep a ſharp look-out, and uſe the greateſt caution, contrary winds continuing, we could make but little way by plying to windward. The 10th September, in latitude 49° 9′, and longitude by time-keeper 186° 40′, we ſaw great flocks of birds flying to the ſouth.

The

The 14th and 15th we had hard gales of wind weſt and weſt north-weſt, and rainy weather; the 16th in the morning we got a ſight of the ſun; our time-keeper gave the longitude 181° 24′ 30″, latitude 49° 1′ 48″, making a difference in our ſhip's reckoning of ſeven degrees in longitude, and ten miles in latitude. During the 24 hours we ſaw ſeveral indications of land being near; as weeds, birds, &c. The 17th, calms and baffling winds, with miſty weather: a freſh eaſterly breeze ſucceeded for about 20 hours; our longitude in the morning of the 18th was, by time-keeper, 179° 22′, latitude 48° 30′; the Bay of Avatſha bearing north 65° 35′ weſt, diſtance 655 miles. We were now without bread, and had but very little water; ſo that we ſhortened the ration of the latter, and gave a ſufficient allowance of peaſe and butter, all hands voluntarily rejecting ſalt meat. A hard gale from the weſt brought us to under mizen and main-ſail for 24 hours.

The 21ſt September, at nine A. M., we obtained ſome diſtances of the ſun and moon, which gave the longitude 178° 46′ 45″. At noon our latitude obſerved was 49° 12′ 35″, which differed nearly eight degrees from our ſhip's reckoning: however, both were kept in the Captain's journal, and our ſituation was very uncertain. The 23d, one of the Aleutes taken on board at Oonalaſhka cut his throat; but not ſo effectually as to cauſe his immediate death: his companions ſaid, it was owing to his extreme grief on hearing that he muſt go to Kamtſhatka. Hard gales of wind continued from the weſt, with hazy and miſty weather, till the 24th in the morning, when we had calms and variable light airs. At ſix this morning we ſaw land bearing north and weſt, and a conical mountain to the north-weſt, diſtant about 15 leagues, which I ſuppoſed to be the eaſtern point

point of Amtſhitka. At eight A. M. our longitude was, by time-keeper, 180° 44′ 45, latitude 50° 50′ 10″. The 25th we ſaw an iſland, and the ſame iſland the 26th; for ſcant winds prevented our making much head-way. The land that we ſaw on the 24th May, on our outward paſſage, was ſo ſtrongly impreſſed on my mind, that I had no doubt of its being the very ſame that we now ſaw; namely, the iſland of Amtſhitka above mentioned. At that time our longitude, by dead reckoning, was 179° 00′, and our latitude 51° 18′. Our obſerved longitude, by time-keeper, was, the 25th September, 179° 11′ 45″, latitude 50° 49′; but the haze made the land appear much nearer than it was; and the fog, hiding it, prevented our aſcertaining its diſtance by correſpondent bearings.

The ſhip's reckoning ſtill differing ſo materially from that of the time-keeper, induced Captain Billings to reject this method of aſcertaining the longitude; but he continued occaſionally to take the ſun's altitude, without making any minutes in the journal; doubting every obſervation, except the meridian altitude for the latitude. His uncertainty naturally increaſed that of others. To elucidate this obſervation, I ſhall take the liberty of tranſlating, from the journal of one of our officers, his remark on the land ſeen the 25th. "Saw land, which ſuppoſe either Copper or Bering's iſland." I ſhall leave my readers to form their own conjectures. We were now at very ſhort allowance of water; and the opinion of all hands on board was taken, whether we ſhould ſeek anchorage, and take in a freſh ſupply. The misfortunes of Captain Bering in 1741 were ſo ſtrong in the minds of all the ſailors, that they declared they would rather riſk ſtarving on board than attempt to land on this iſland.

We

We continued a north-weſt courſe till the 3d October at noon, when our obſerved latitude was 52° 16′ 14″. By our reckoning, we had paſſed Sheeponſkoi Noſs 50 miles, and were only 40 miles from the Bay of Avatſha from our bearings by Captain Cook's chart. The 5th October we got an obſervation of the ſun and moon's diſtance, at 3° 32′ 21″ apparent time; which made the longitude 167° 12′ 22″, latitude 52° 57′; by our reckoning, we were in longitude 157°, nearly acroſs the land of Kamtſhatka.

October the 10th, at noon, the haze clearing a little, diſcovered over our ſtarboard-quarter Sheponſkoi Noſs, north-eaſt 22°, diſtance 20 miles; latitude obſerved, 52° 52′ 34″; and ſhortly after we ſaw the mouth of the Bay of Avatſha; but contrary winds and calms prevented our getting into the harbour of St. Peter and St. Paul till the morning of the 14th, at which time numbers of our crew were infected with the ſcurvy; but all perfectly recovered after they had been a few days on ſhore. Our Doctor's journal contained the following remarks: "It was only towards "the end of the voyage, when our bread was out, and we were "reduced to a ſhort allowance of water, that the ſcurvy made its "appearance. At this time peaſe and grits boiled to a thick con-"ſiſtency in a ſmall quantity of water, and buttered, were ſub-"ſtituted for ſalted proviſions. The ſymptoms were, coſtive-"neſs, a breaking out, with itching, bleeding of the gums "and noſe, pains in the legs, and ſome were ſwollen. Upon "our arrival, numbers had pains in their joints, with extreme "laſſitude, fluſhing heat, dry cough, and an oppreſſion of the "breaſt: bleeding ſparingly, thin drink, and freſh fiſh, reſtored "all hands in a very ſhort time.

"The

" The men employed in filling the water caſks at Oonalaſhka " got cramps in their feet and legs, fluſhing heat and violent " head-ache, which was cured by adminiſtering ſudorifics."

I think this aroſe ſolely from the careleſſneſs of the men, in going with wet feet. The water was a collection of melted ſnow, very cold. The weather hazy and damp. At nights, 2, 3, and 4° above the freezing point, and at noon only 6, 7, and 8°.

We joined here the reſt of our company, who arrived during the ſummer from Ochotſk all in good health.

I fear that my account of our return from the coaſt of America will have ſeemed tireſome to ſome of my readers; although I have been as conciſe as poſſible. One remark, at leaſt, I think it neceſſary to make; namely, that I am neither ſailor nor aſtronomer; nor knew aught of either of the ſciences until I embarked on the expedition.

CHAP. XVI.

Mr. Pribuloff appointed to the Sturman's place, vacant by the Death of Mr. Bronnikoff; he goes in ſearch of an Iſland.—Diſcovers one which he names St. George's Iſland, and another, to which he gives the name of St. Paul's.—Arrival and generous Behaviour of an Enemy's Ship, the Mercury, Captain Coxe; and the Aſtoniſhment of the Ruſſian Settlers.—The Ruſſian Secretary put in Irons and ſent to Irkutſk, on ſuſpicion of improper Correſpondence.—Leave St. Peter and St. Paul.—Reach Bering's Iſland, and narrowly eſcape a Rocky Point.—Copper Iſland.—The Iſlands of Attoo and Agatto.—Semitſh.—Buldyr.—Kyſka.—A Cluſter of Iſlands.—Dreſs and Amuſements of the Inhabitants.—Two Natives of theſe Iſlands, who had been Attendants on Captain Billings, put on ſhore.—Leave Tanaga, and after paſſing ſeveral Cluſters of Mountainous Iſlands, arrive at Oonalaſhka.

Our firſt buſineſs was, to unload and lay up our ſhip for the winter; then to diſpatch our ſhip-builder with neceſſary hands to Neizſhni, Kamtſhatka, to build a conſort for the Slava Ruſſie, to accompany our next year's adventures.

The materials for this purpoſe arrived with the tranſport veſſel from Ochotſk. The vacant ſturman's place, occaſioned by the death of Mr. Bronnikoff at Ochotſk, was ſupplied by Mr. Pribuloff, who accompanied a trader's veſſel three years back on the part of Government to collect tribute. At the ſame time he took

charge

charge of the veſſel as commander, on the part of the trading company; for which he received a ſhare in the profits of the voyage. He made Oonalaſhka, and from his former obſervations that numbers of ſea animals, particularly young kotic, came from the north in the autumn, at the commencement of ſevere weather, he had formed a conjecture, that ſome unknown iſland lay at no great diſtance in that direction; and therefore reſolved, without loſing time, to take on board as many iſlanders as he could obtain, with their ſmall canoes and arms, and be convinced of the certainty or uncertainty of his ſuppoſition.

Twenty-four hours after his departure from the iſland of Oonalaſhka, he diſcovered land. The ſouthern and weſtern parts are ſurrounded by rocks; but the north is eaſy of approach, and affords good anchorage in a commodious bay for ſmall veſſels, not drawing above eight or nine feet water. The whole iſland is volcanic, deſtitute of inhabitants, and only produces the bulbs, plants, and berries, which are to be met with on all the Aleutan iſlands. They found the low lands and the ſurrounding rocks covered with ſea animals, particularly the urſine ſeal (kotic), and ſea-lion (ſivutſha); and with the ſkins of theſe animals they nearly loaded their veſſel. Pribuloff called this St. George's Iſland; and obſerving another iſland to the north, at the diſtance of 44 miles, he went thither in a large baidar, accompanied by a number of Aleutes. This iſland is much ſmaller than that of St. George, and he named it St. Paul's: this, as well as the former, was the retreat of immenſe herds of ſeals. On the iſland of St. George they paſſed the winter, and found the inland parts overrun with foxes, which afforded them a profitable chaſe. It alſo abounded with the tuſks of the walroſs, which they picked up on the ſhores.

Laſt autumn he returned to Oonalaſhka, where he paſſed the winter. A European veſſel put into the bay of Udagha, which Mr. Pribuloff viſited: it was the Mercury, Captain Coxe, copper-bottomed, and mounting ſixteen guns. From this veſſel, which he ſaid had only two maſts, he received intelligence of the war between Ruſſia and Sweden. The Captain was inquiſitive about the Ruſſian eſtabliſhments, their force, and ſhipping: to explain which, Pribuloff took the Captain and his officers to their habitations, but could not treat them with any thing except ſaranna, berries, the dried meat of the ſea-lion, and fiſh, without bread. They expreſſed aſtoniſhment at every thing they ſaw, but moſt at their manner of living, &c. On their return to their own ſhip, they ſent Pribuloff a ſupply of bread, brandy, and other neceſſaries, ſome articles of dreſs, and a quadrant, as preſents; and a few days after left the iſland.

Nothing in the world can aſtoniſh a Ruſſian more than diſintereſted liberality, or any kindneſs without ſome proſpect of future benefit. Greatneſs of ſoul is applied to every man who is juſt, and grants his ſervants ſome few indulgences; every thing beyond this is called folly, and is ſure to be impoſed upon: nor have they any ſentiment of feeling, except it be excited by blows. Taking this for the ruling character of the Ruſſian hunters, it will be eaſy to conceive the aſtoniſhment of Pribuloff and his companions at the liberality of Mr. Coxe: but how much was their amazement increaſed, when, on their returning to Ochotſk, they were informed, that this very Captain commanded an enemy's ſhip, and actually had a Swediſh commiſſion to deſtroy the Ruſſian eſtabliſhments! They could not imagine what inducement he could have to ſhew them any mercy, much leſs to heap kind-

neſſes

neſſes upon them. Pribuloff himſelf ſaid, " They had every thing, " and ſaw that we had nothing worth their taking; therefore " they made us preſents; for they were aſhamed to be enemies " to ſuch poor wretches *."

I am inclined to think that his conjectures were juſt; and I feel myſelf intereſted in relating this anecdote, which, in my opinion, does ſo much credit to an European ſailor, of whatever nation he may be.

Nothing material happened this winter, the greateſt part of which we paſſed at Bolſhoiretſk, receiving frequent intelligence of the progreſs at Neizſhni under the direction of Captain Hall, who acquainted us that his veſſel would be ready to put to ſea as ſoon as the river Kamtſhatka ſhould be free of ice. One circumſtance, however, I think it neceſſary to mention. The Ruſſian ſecretary, Vaſſiley Diakonoff, having given diſſatisfaction to Captain Billings, and being thought to have entered into a private correſpondence with Mr. Shelikoff, and diſcloſed ſome ſecrets of the expedition, was put in irons and ſent to Irkutſk, to anſwer for his conduct on the return of the expedition.

I forbear making any comment upon this buſineſs, or giving any particular account of Kamtſhatka, until I take my final departure from it.

* The liberality with which the Expedition under Captain Cook treated the natives of every place they touched at, infuſed into their minds an aſtoniſhing idea of the wealth and profuſion of the nation from whence they came: this, therefore, was a very natural concluſion of Pribuloff.

Coreilin was the commander of the hunting parties on ſhore; and he alſo received ſeveral preſents from the Mercury.

We

We paſſed the winter in excurſions of pleaſure, and in dancing and card parties, chiefly at Bolſhoiretſk, where the luxuries of life are more plentiful than in the harbour of St. Peter and St. Paul. The froſt was ſometimes very ſevere, and we had for a few hours 21° below the freezing point of Reaumur. Two or three earthquakes happened about the neighbourhood of Neizſhni; but, except a ſlight ſhock on the 21ſt November at noon, none of them reached the harbour of St. Peter and St. Paul.

In the beginning of the month of April 1791, all hands repaired to the harbour. Inſtructions were ſent to Captain Hall (to whom the command of the ſecond veſſel was allotted as ſenior officer), to be at Bering's iſland by the 25th May; and if he did not find us, to wait till the 30th: we alſo were to wait till the 30th for his veſſel, if we arrived earlier. In caſe we ſhould not meet there at all, the ſecond place of rendezvous was appointed at Oonalaſhka.

We took in a good ſupply of water, rolling the caſks over the ice of the harbour to the ſhip. We alſo took a greater quantity of proviſions than in the preceding voyage; though the ſalted meat was leſs nouriſhing, having lain ſo much longer in the caſks. The different meſſes took a good ſtock of dried and pickled ſalmon, berries, wild onions, &c.

By the 1ſt of May the bay of Avatſka was clear of ice, and not before, owing to the ſeverity of the winter: but the inner harbour of St. Peter and St. Paul remained frozen up.

On the 8th, we broke the ice of the harbour to make a paſſage for the ſhip, and hauled her into the bay. The thermometer ſtood at 2° to 4° of heat, the wind blowing right againſt us till the 13th, when it fell calm. We now took the ſmithy and all hands on board, and hauled off the battery point. Baffling light airs detained us till Friday the 16th, at four o'clock in the morning, when we weighed anchor with a gentle breeze from the north, and ſaluted the battery with ſeven guns, which was returned with an equal number. The wind falling ſcant, and ſhifting to ſouth-weſt, with a contrary current, we made but little headway, and caſt anchor at four P. M. in the mouth of the bay, the lighthouſe bearing north-eaſt 86°, diſtant about one mile. The next morning a moderate breeze ſprung up from the eaſt, which brought with it a very thick fog. The tide ſetting againſt us to the weſt, at three knots and a half, our ſhip drove unobſerved, and we diſcovered that we had a flat ſtone bottom at twelve fathom. We drove very near the ſouth-weſt rocky ſhore, ſent a kedge to the north-eaſt into good anchorage, weighed anchor, and hauled a-head. At ten A. M. a gentle breeze ſpringing up from ſouth, we took in our kedge, and ſtood about two knots north north-weſt, when, coming to a good bottom, we brought up with our beſt bower. At noon we obſerved the latitude 52° 55′ 32″.

All the 18th we had variable light airs, with cloudy and hazy weather. The Kamtſhadals that were out among the rocky iſlands, ſeeking eggs, brought us a very conſiderable ſupply, as alſo of ſea-fowl.

Monday, the 19th May, we weighed anchor at four A. M. with a gentle weſt ſouth-weſt breeze, ſtood out of the bay of Avatſha,

Avatſha, and hoiſted our boats on board, going eaſt by north at three knots. At noon, our bearings were Povorotnoi Muis (Cook's Cape Gaveria), ſouth-weſt 23° 30′; Villuitſheſkoi Peak (Paratounka Sopka) ſouth-weſt 72°; lighthouſe, by true compaſs, north-weſt 58° 23′, diſtant ſeven miles and a half; latitude of ſhip's place obſerved 52° 49′, longitude 158° 56′, variation one half point eaſt, from whence we took our departure, and continued our courſe all day.

On the 20th we ſaw immenſe numbers of grampuſſes, porpoiſes, and many whales. We had a freſh gale from the north, hauled the wind, and kept a courſe eaſt north-eaſt, under close-reefed top-ſails. In the afternoon, moderate wind. The 21ſt, at noon, latitude 53° 9′, longitude 161° 39′. Sheponſkoi Cape bore due weſt, diſtant about fifteen leagues. I make this cape in latitude 53° 9′, longitude 160° 3′, variation three-fourths of a point eaſt. Variable light winds, and calms, prevented our making much head-way till Saturday the 24th; when, early in the morning, a breeze ſprung up from the ſouth-weſt, and we ſailed north at the rate of ſix knots. At noon our obſerved latitude was 54° 14′, corrected longitude 162° 30′. The eaſtern extremity of Kronotſkoi Cape bore north 2° 30′ weſt. In the evening the breeze died away, and calms and light airs followed till the morning of the 27th, when we had a gentle breeze from the weſt ſouth-weſt. At noon our latitude obſerved was 54° 45′ 22″, longitude 165° 36′. At three P. M. ſaw Bering's iſland, the ſouth-weſt point of which bore north-eaſt, the ſouth-eaſt extremity north-eaſt 73°. At eight P. M. the wind freſhened, with hazy weather, and ſqually; the land was about four miles to leeward, and a detached rock off the north-weſt extremity a-head of us. Mr. Bakoff, who had the watch, firſt diſcovered the dangerous ſituation;

ſituation; and it was owing to his preſence of mind, in immediately crouding all the ſail the ſhip could carry, that we weathered this rock, at not the ſhip's length from it, carrying her gunwale nearly under water. Having cleared this point at eleven P. M. we ſtood away more large, with very hazy weather.

This iſland's ſouth extremity bears by true compaſs from the harbour of St. Peter and St. Paul north-eaſt 67°, its diſtance 192 miles, trending north-weſt 35°, forty miles. The weſt ſide of the iſland is mountainous, and covered with ſnow; the ſummits were hid in the haze and fog. The north point is low land, free of ſnow. Here are two bays where merchants' galliots winter; but they are ſhoal, dangerous of approach, and expoſed to the north winds. A ſmall rivulet runs into each of them, in which tranſparent white pebbles are found; and ſometimes, after a hard gale of wind from the north, ſmall pieces of native copper are caſt on the ſhores. The north point is in latitude 55° 25′, longitude 166° 15′.

The 28th, at noon, our latitude was 55° 14′ 23″, corrected longitude 166° 50′. At two P. M. the ſun and moon's diſtance gave the longitude 166° 52′ 45″, which perfectly agreed with our ſhip's reckoning: variation one point eaſt. The wind blowing freſh from the ſouth-weſt, we could not attempt to enter the bay to ſeek for the ſecond veſſel; and it was reſolved to proſecute our voyage to Oonalaſhka.

The 29th, at three o'clock in the morning, being very foggy, we ſaw Copper iſland aſtern of us; ſo that we muſt have paſſed it very cloſe indeed. Our courſe was eaſt ſouth-eaſt, the wind

blowing freſh from the ſouth-weſt. Owing to thick weather, we could only obſerve that Copper iſland is mountainous, bearing from Bering's iſland's ſouth point north-eaſt 65°, diſtant 27 miles, trending ſouth-eaſt 61°, twenty-five miles: rocks between the iſlands, and off their northern extremities. At five P. M. the ſun and moon's diſtance proved our longitude 169° 0′ 15″, latitude 54° 14′. In the evening the wind died away.

The 30th, our latitude at noon was 53° 43′, longitude 170° 12′. At ſeven P. M. we ſaw land, a lofty mountain covered with ſnow, ſouth-eaſt 30°, which was ſoon hid by the haze and darkneſs of the night. Light airs all night and the next day, with a conſiderable ſwell from the ſouth. Hazy weather prevented our ſeeing the land again till Wedneſday the 4th June at three A. M. when the weſt extremity of Attoo bore north, diſtant 13 miles, and the eaſtern point north-eaſt 72°. Going eaſt north-eaſt at two knots, with little wind from the weſt-north-weſt, at noon latitude by account 52° 32′, longitude 172° 15′, variation one and one-fourth point eaſt. At four P. M. the weſt of Attoo bore north-weſt 31° 30′, Agattoo's north-weſt point, north-eaſt 60°. We threw the ſhip in the wind, and got ſoundings with 75 fathoms, ſtony bottom.

The iſland of Attoo is mountainous and covered with ſnow. Its weſtern end bears by true compaſs from the ſouth of Bering's iſland ſouth 61° eaſt, 215 miles diſtant: its direction eaſt and weſt about 60 miles. Detached rocks are off the weſt point; and its ſouth ſide has ſeveral openings appearing like coves, but expoſed to the ſouth. From the eaſt of Attoo to the weſt of Agattoo the diſtance is 20 miles ſouth-eaſt one-fourth eaſt, trending

ing eaſt about 16 miles. Here alſo appear ſome openings, but the entrances are barred by a reef of rocks. The weſt extremity is low land gradually aſcending. Eight miles from the point is a very lofty mountain, the top of which was hid in the clouds, as was alſo the higher land towards the eaſt. Ten miles north is the little iſland of Semitſh, and off the eaſtern point is a ſtill ſmaller iſland.

We kept an eaſterly courſe; and at noon of the 5th our obſerved latitude was 52° 10′ 25″, corrected longitude 174° 17′, with a very hazy horizon. At two P. M. we ſaw Buldyr, north-eaſt by north one-half eaſt: ſhortly after we had rainy and thick weather. Buldyr bears by true compaſs from the iſland of Agattoo north-eaſt 88°, diſtant 70 miles. This is an oval rock, very lofty, ſix miles from north to ſouth, and four miles acroſs. Off the eaſt and weſt points are detached rocks, to the weſt they extend to a conſiderable diſtance.

The 6th, at three o'clock in the morning, we ſaw the iſland of Kyſka to the ſouth-eaſt, a detached rock ſouth-eaſt 64°, and ſhaped our courſe through the ſtraits, to get to the north of the iſlands.

Theſe ſtraits are 64 miles wide. The north point of Kyſka bears eaſt from the ſouth point of Buldyr; its direction ſouth by eaſt, and extent 26 miles, terminating in a point of moderate height, and 20 miles acroſs in the wideſt part: there is ſome low land about the eaſt extremity, and it contains many rocks. At noon our latitude by account was 52° 23′ 20″, longitude 177°, when we roſe a cluſter of iſlands; the moſt weſtern of which

is called Sigoola, 14 miles eaſt of Kyſka. This is nearly round, and nine miles in circumference. Kriſſey iſland is about an equal diſtance from Kyſka to the ſouth-eaſt, ſmall and rocky. The iſland of Amtſhitka lies about eight miles eaſt north-eaſt of Kriſſey, and trends eaſt nearly 60 miles in extent. It has an expoſed bay to the ſouth; the north ſide is acceſſible for boats; but the cluſter of iſlands on this ſide render its approach by veſſels impoſſible. Off its eaſtern extremity, due north, at the diſtance of 28 miles, is the iſland Semi Sopeſhnoi, or Seven Peaks, trending eaſt and weſt 22 miles. The fog, however, ſoon hid theſe iſlands from our ſight.

Thick weather prevented our ſeeing land till the 9th, when, at noon, the ſun broke through the haze, and we ſuddenly ſaw the land over the ſtarboard fore-yard arm, appearing cloſe to the ſhip: a tremendous barren mountain ſtreaked with ſnow immediately diſcovered its baſe, bearing from north-eaſt 62° to ſouth-eaſt 46°, diſtant in the neareſt place about half a mile (but no ſoundings with 100 fathom line); a perpendicular rock. The ſun's altitude in the haze was 61° 10′, which gave the latitude 52° 5′ 21″; by ſhip's reckoning 52° 6′; longitude 180° 22′; variation one point and a half eaſt. The wind blew pretty freſh from the north; and, as it was impoſſible to weather its point, we ſhaped our courſe ſouth-eaſt by ſouth. At firſt we took the rock for the Volcano Gorelloi; but ſoon diſcovered it to be the north-weſt extremity of Tanaga, which is formed by an uneven-topped volcano, appearing like a cluſter of mountains. One terminates in a conical point, of extreme height, emitting ſometimes a column of ſmoke. They are all covered with ſnow, which deſcends in ridges to below the middle of the mountain, but much darkened

darkened by the quantity of aſhes upon it. This mountain occupies a ſpace of eight miles ſouth, and ſix miles eaſt by north. South ſouth-weſt eight miles from the north-weſt extremity of the iſland, the high land terminates by a projecting rocky cape, ſharpened by ſeveral detached needle rocks, behind which we thought there might be good anchorage. Captain Saretſheff volunteered to explore, and went in the evening in the long-boat with this intent. We ſtood off and on to wait his return; a thick fog, however, fell upon us, which continued till the next day at noon. During this time we very frequently experienced ſtrong rippling tides in various directions, but chiefly ſouth and ſouth-eaſt. Our diſtance was about one mile from ſhore, and we ſaw the long-boat pulling on board, which ſoon arrived. Mr. Saretſheff found pretty good anchorage ſix miles ſouth ſouth-weſt behind the needle rocks; our obſerved latitude at noon was 51° 56′ 3″, one mile eaſt of the neareſt land. It falling calm, we towed into the bay, and came to anchor at ſix P. M.; Gorelloi Volcano bore weſt north-weſt, diſtant 22 miles. In the fog yeſterday we muſt have paſſed this mountain very cloſe indeed. We did not ſee the top of this volcano on account of the clouds reſting upon it; but the ſhores are very ſteep, and there is no acceſs, except in very calm weather, on the ſouth-weſt part for boats; its bearing from Kriſſey iſland ſouth 81° eaſt, diſtant 107 miles, ſix miles from north to ſouth, and three miles from eaſt to weſt. I have deſcribed the north-weſt part of Tanaga to the ſpiral rocks trending ſouth ſouth-weſt eight miles; theſe rocks form the north bounds of a ſmall baſin, in which we came to anchor in latitude 51° 52′, and longitude 180° 25′. It is about two miles and a half in circumference, with a ſandy bottom ſeven fathom; and, at the head of the inlet, is a very convenient watering-place; it is, however, expoſed to the north-weſt winds.

From

From this place the land trends weſt by ſouth eight miles, low and very verdant; terminating in a ſandy cape, from whence the iſland ſtretches away ſouth by weſt 15 miles; all, except the north, is low land, with freſh water lakes; but interſperſed with ſome riſing grounds, near which are the deſolated dwellings of the former inhabitants. We found the earthen habitations in one place contain about 20 women, and only a few men, either old or very infirm, which conſtitutes the preſent population of the iſland, excluſive of a few children. The male inhabitants had been taken by Luchanin's company of hunters to aſſiſt them in the chaſe; and what induced the remainder to ſuppoſe that it was not the intention of Luchanin that they ſhould ever return, but form an eſtabliſhment perhaps on the coaſt of America (which they call Kanaiſki Land), was, that he had alſo taken as many women with him as he could poſſibly ſtow away in his galliot. We learnt, however, from theſe remaining inhabitants, that their companions did not go voluntarily. This iſland was formerly very well inhabited; but the Ruſſians have almoſt depopulated it, which is completely the caſe with thoſe to the weſt.

The inhabitants dreſs exactly like thoſe at Oonalaſhka; but the women have not ſo many ornaments. They ſpeak different dialects of the ſame language as at the above-mentioned iſland. Their dances and diverſions, however, ſeem different. They are more graceful in their motion, extremely modeſt in all their actions; and quite unlike all other ſavages that I have ſeen, by being free from laſciviouſneſs. Young men amuſe themſelves with jumping on the ſkin of a large ſea-lion, held in the air by four or ſix men. They leap and lighten upon their feet, and by degrees are thrown up to an immenſe height: when they are tired they leap off upon the ground. I attempted to leap in this manner,

but could not ſucceed; for the ſudden jerk either cauſed my knees to bend, or elſe threw me out of the centre; and they explained the cauſe by telling me, that I looked upon the ſkin, whereas I ought to keep my body erect, and look upwards; at the ſame time I ſhould not leap, but let the men throw me up. Their boats are larger and more heavy than thoſe of Oonalaſhka, though made upon the ſame principle.

We had on board three natives of this and the neighbouring iſland of Kanaga, taken from hence in the year 1785 by Gregory Shelikoff, of whoſe behaviour upon theſe iſlands we received very unfavourable accounts. Two of them had been the attendants of Captain Billings from the time of his firſt arrival at Ochotſk in 1786; and now embarked with a view of being left at their native habitations; to which, notwithſtanding the deſolation that they beheld, they flew with ſatisfaction; (a ſtrong proof of the attachment of mankind to the country where they have paſſed the years of innocence and happineſs!) content in the poſſeſſion of a piece of paper which exempted them from the ſlaviſh demands of the Ruſſians * (in caſe they chooſe to pay any attention to it). Thus rewarded, with the addition of a few articles of dreſs, the free gift of different officers on board, and with a very ſmall quantity of tobacco, they were put on ſhore.

This was not quite the ſtile in which Omai was returned to his family and friends by Captain Cook; for all the wealth that theſe poſſeſſed between them could not create envy among their brethren; nor could all the accompliſhments which they had ac-

* I hope that my readers will not confound the character of theſe deſperate exiles with the general character of the Ruſſians, who are kind and hoſpitable to an exceſs.

quired,

quired, during a ſix year's ſervice in conſtant employment with the utmoſt diligence and fidelity *, prove any recommendation to their relatives, or qualify them to obtain their living by the productions of the chaſe; for only one of them was capable of rowing in their ſmall baidars, and I believe that only in ſmooth water. I cannot ſee any other means of their ſupporting themſelves than by digging the edible roots, and obtaining the ſhell-fiſh with which the ſandy ſhores abound, particularly cockles of an extraordinary ſize.

The rocks have alſo a variety of muſcles, and ſeveral ſpecies of limpets that adhere to them juſt at low water mark; a particular ſpecies in great abundance called by the Ruſſian hunters baidars, from the great reſemblance which they bear to their open boats, with a row of jointed ſhells along the centre of the back; theſe are devoured by the natives both raw and dreſſed, and I thought them very good eating; the largeſt were about three inches long, and one inch broad, very fleſhy and firm. Whales are frequently caſt aſhore upon the ſandy point of this iſland, and afford food and light for a conſiderable time.

One ſpecies of whale is frequently caſt on ſhore both on theſe iſlands and on the coaſt of Kamtſhatka, which the natives never eat, but only uſe the fat to burn. They know no difference in its appearance; but obſerve that neither gulls, nor any bird of prey, or fox, will eat of it. They ſay, that the Ruſſian hunters

* One of theſe lads attended Mr. Main and me at the time we were at the Kovima. Main aſked him, what the ſavages would do ſhould he (Main) fall into their hands? The boy replied: "Sir, you ſhall never fall into their hands if I am with you; for I do always carry a ſharp knife about me; and when I ſee that there is no poſſibility of your eſcaping, I will ſtab you to the heart, and then they will not meddle with you."

have

have uſed it for food; that its fat turns in the ſtomach to an oil of ſo ſubtile a nature, as to paſs through all the pores of the body, while the fleſhy parts are emitted in an undigeſted ſtate; and that if thoſe who have eaten it have formerly had wounds or ulcers, although theſe have been cured for years, they break out afreſh. Several of the hunters told me, that they had eaten of this whale, and that the account which the natives gave of the ſubtileneſs of the fat, and the undigeſted ſtate in which the more ſubſtantial parts paſſed through them, was true; and that ſome of their companions, who had been cured of the venereal diſtemper, became again violently affected with that diſmal diſeaſe, merely from this food. The ſame property, however, is attributed to the fleſh of whales in general.

This was the only iſland on which we obſerved the eider-duck; and it was about the lakes here in great plenty. The dreſſes made of their ſkins are eſteemed the beſt of all the feathered tribe, being more ſoft, warm, and ſtrong, than any others.

We remained at anchor till Sunday the 15th, and the whole time experienced hazy and miſty weather, which prevented our ſeeing the ſmall rocky iſlands to the weſt, which were formerly the places of reſort of the ſea-otter and other marine animals, now nearly extirpated, or entirely driven from theſe parts. At three P. M. we got under weigh, with a gentle breeze from the ſouth-eaſt, and ſtood away weſt north-weſt to double the north cape of the iſland; but, the wind being ſcant and ſhifting to the north-eaſt by eaſt at ſix P. M., we kept working to windward all the 16th.

The 17th, ſtill plying, at noon our obſerved latitude was 52° 7′ 55″. We made the iſland of Kanaga ſeven miles diſtant from that of Tanaga, and ſaw the ſmoke aſcending from the hot ſpring at the foot of an extinguiſhed volcano on the iſland of Kanaga, off which at 12 miles we alſo obſerved the ſmall iſland called Bobrovoi, from the number of ſea-otters that formerly held their reſting-place upon it.

The wind ſtill continuing from the north-eaſt quarter, with very thick weather, which prevented our diſcovering the leeward iſlands, we reſolved upon paſſing the ſtraits weſt of Tanaga, where we ſtood at anchor to get to the ſouth of the iſlands. At three A. M. of the 18th, we ſtood ſouth-weſt by ſouth, with a gentle breeze from north-eaſt by north, which freſhened by noon to a briſk gale. The weather was hazy; our latitude by account 51° 48′ 5″, the body of Gorelloi Peak bearing ſouth-weſt 72°, when we roſe the low iſland of Illuk ſouth-weſt 6°, diſtant from the low ſouth-weſt extremity of Tanaga 12 miles. We ſhortly after ſaw the rocky iſlands between Illuk and Gorelloi. The 19th, eaſterly ſqualls and thick weather, with flying clouds at noon, when we got a ſight of the ſun; and the latitude obſerved was 51° 27′ 20″, corrected longitude 181° 29′, variation of the compaſs one point and a half eaſt. Afternoon rainy with a hard gale. At five P. M. it brought us under our courſes cloſe hauled on the ſtarboard tack.

The 20th, at noon, having moderate wind from the ſouth, ſet cloſe-reefed topſails, and ſtood away eaſt by north, latitude by account 51° 2′, hazy weather, and no land ſeen. The 21ſt, at noon, obſerved latitude 51° 4′ 57″, corrected longitude 182° 22′. At five

five P. M. saw the island Adach; its western low extremity north-west 15°. At seven, having made the last two hours seven knots and a half north north-east, the low extremity of Adach bore north-west 39°, distant 17 miles, and we rose another island north north-west, when the haze hid all land until Sunday the 22d, at seven A. M. when we saw mountains, and at eight found ourselves near a cluster of fifteen small islands, mountainous and of various forms. At noon our latitude observed was 51° 58′ 38″, corrected longitude 184° 48′. We were now sailing with a moderate breeze from the south to the north-east, at the rate of six and seven knots through the straits formed by the cluster of mountainous islands before mentioned; some of them not half a mile off (soundings from 30 to 50 fathoms, shells and coral); the largest, Gorelloi island (not Peak), north-west 57°. My memoranda, taken from the original log, not being here very distinct, I am unable to give the exact bearings and distances of these islands. We passed the north point of Alcha, however, about four miles from the land, when we were surrounded by a thick fog.

The 23d, at noon, our latitude by account 53° 4′, longitude 187° 48′, we allowed variation one point and three quarters east; very foggy all day. Continued our course north-east half east 24 hours, until Tuesday the 24th at noon, when our distance run proved 128 miles north east 80° 24′, making our latitude 53° 27′, longitude 191° 28′, rainy, misty, and foggy weather, which prevented our seeing land till half past one, when we suddenly saw land south-east, about two miles and a half distant, which was known to be a promontory on Oomnak; upon which we shaped our course north-east. At five P. M. we rose the north-west extremity of Oonalashka, south-east 85°. At nine P. M. passed the

remarkable rock, reſembling a ſhip under ſail, in the middle of the ſtraits, between Oomnak and Oonalaſhka, and opened Tſhernefſki bay ſouth-eaſt 16°. Upon ſeeing land ahead, hauled the wind and ſtood away north. At ten P. M. being about three miles from the ſhore of Oonalaſhka, we ſent the baidar to examine the coaſt, which was hid from our ſight in the haze, and ſtood off-and-on all night. The next morning, Wedneſday, the 25th June, at four A. M. with a gentle breeze from the weſt, being well in with the land, ſeveral natives came on board, under whoſe pilotage we ſtood into the bay of Amoknak; and at three P. M. came to anchor in the baſin of Illuluk, about 20 fathom from the dwellings that bear this name, and ſhortly after ſent the obſervatory on ſhore.

Captain Hall was not yet arrived: a circumſtance rather unaccountable to us, except on the ſuppoſition that he could not get ſo ſoon ready to leave Kamtſhatka as he expected.

CHAP.

CHAP. XVII.

Captain Billings abandons all thought of re-viſiting the American Coaſt to the ſouth of Cook's River, and prepares to ſail for the Bay of St. Laurence.—Reflections of the Author.—Sail for the Bay of St. Laurence.—The Iſlands of St. George and St. Paul.—Gore's Iſland, &c.—Captain Billings, &c. land on the Continent of America; of which viſit ſome Particulars are given from the Memoranda of a Gentleman in the Party.—Come to anchor in the Bay of St. Laurence.

Captain Billings now declared, that he was reſolved to abandon every idea of reviſiting the American coaſt to the ſouth of Cook's River; but determined to proceed (ſo ſoon as he had taken in a freſh ſupply of water, landed proviſion for the veſſel under the command of Captain Hall, and taken on board ballaſt in its ſtead) direct to the Bay of St. Laurence, in the land of the Tſhutſki, where two petty officers, Dauerkin and Kobeleff, ſent from Ochotſk in 1789, had orders to wait our arrival; and, in caſe Captain Hall ſhould not arrive in the mean time, orders were to be left with Mr. Allegretti (his ſurgeon), Ivan Alexeeff (an enſign), and one ſailor, who were to remain on ſhore to guard the proviſion, that he ſhould immediately follow us to the above-mentioned Bay of St. Laurence, where Captain Billings meant to land, without even attempting to ſee how far he might be able to paſs through Bering's Straits; aſſerting, that the ſeaſon was too far advanced, and that he ſhould have an opportunity of aſcertaining every thing neceſſary by land.

Nothing

Nothing in the world could have afforded me leſs ſatisfaction than this reſolution, which I regarded as the concluſion of an expedition that was ſet on foot with unbounded liberality by the moſt magnanimous ſovereign in the world; which had raiſed the expectation of all nations to the higheſt pitch, and induced mankind to anticipate the ſatisfaction of obtaining the moſt complete knowledge of the geography of this unknown part of the globe, together with a conviction of the exiſtence or non-exiſtence of a north-weſt paſſage. But, alas! after ſo many years of danger and fatigue; after putting the government to ſuch an extraordinary expence; after having advanced ſo far in the attempt, even at the very time when we were in hourly expectation of our conſort, and, as appeared to me, being juſt entering upon the grand part of the undertaking, thus to abandon it, was the moſt unaccountable and unjuſtifiable of actions.

I deſpaired of ſeeing Captain Hall again, at leaſt until our return to Kamtſhatka, or perhaps St. Peterſburg, unleſs we ſhould be ſo fortunate as to join company before leaving this iſland, which might, perhaps, alter the preſent plan, and lead us to purſue the real object of the expedition.

The remonſtrances of Captain Saretſheff at the Kovima, on the Icy Sea, &c. &c. and in fact the repreſentations of every officer who had hitherto preſumed to have an opinion, were always treated by the Commander with petulant and illiberal retorts. I have, indeed, had too frequent opportunities of obſerving, that rank and power intoxicate the poſſeſſor, unleſs they have been the reward of real merit, or the conſequences of ſeniority in actual ſervice; in which caſes, the value of authority is known, as wealth gained by labour,

and not uſed as the accidental and unexpected inheritance of a prodigal.

Excepting Captain Billings, Mr. Saretſheff was the only naval officer on board; and I can affirm, that the latter was the only ſcientific navigator in our Expedition: a gentleman, who poſſeſſed that particular modeſty which is always the companion of merit, with feelings the moſt acute, refined by true ſentiments of honour; to which (at one time, at leaſt) he had hopes of adding ſome luſtre in the preſent undertaking. His duty at length got the better of his feelings ſo far, as to lead him to aſk, whether no other perſon could be ſent by land, while Captain Billings himſelf made a ſecond attempt by ſea? And, whether it was abſolutely neceſſary for him (Billings) to go? Receiving only evaſive anſwers, however, he entertained hopes of better ſucceſs if Captain Hall's arrival ſhould ſtrengthen his efforts *.

* I would moſt willingly have drawn a veil over this part of my narrative; but that my ſo doing, I thought, would have been more unjuſt than the cauſe that gave riſe to it, and at the ſame time would have eclipſed the merit of other officers on board. The officers of the three watches were, Captain Saretſheff; Mr. Bakoff, a gentleman whoſe buſineſs it was to take care of the ſhip's materials, boats, &c. but who knew nothing of navigation or numbers; and Mr. Batakoff, a ſturman, or maſter, whoſe duty was to keep the log reckoning, con to the helmſman, &c. but who had nothing to do with the working of the ſhip; his learning extended to a common day's work; taking the ſun's altitude at noon, and its azimuth for the variation; making ſurveys, &c. Theſe gentlemen, from their experience, were well qualified to keep watch; and, although not the moſt learned of men, poſſeſſed

" Good ſenſe, which only is the gift of Heav'n,
" And, though no ſcience, fairly worth the ſev'n.

They were active, zealous, and enterpriſing; particularly Mr. Bakoff, who was alſo bleſſed with aſtoniſhing preſence of mind in all caſes of neceſſity or danger. The ſailors and petty officers were divided into two watches: and it may be proper here to remark, that not one of the common ſailors had ever ſeen a ſhip before; which, indeed, was the caſe with all the petty officers, except three.

Having

Having landed the proviſions and ſtores for the ſecond veſſel, taken in a ſufficient quantity of ballaſt, and a ſupply of freſh water, we were completely ready for ſea on Monday the 7th July. In the evening Mr. Allegretti (Captain Hall's ſurgeon), Ivan Alexceff (an enſign of jagers), and a ſailor, were put on ſhore, to guard the ſtores, and with inſtructions for Captain Hall to follow us to the Bay of St. Laurence. At nine P. M. weighed anchor; but, falling calm, we hauled about two knots out of the baſin, and again brought up.

Thurſday July 8th, weighed at four A. M. with a gentle ſouth-weſt breeze; but ſhortly after a calm compelled us a ſecond time to come to anchor in 18 fathoms in the Bay of Amoknak, over a fine ſandy bottom. At two P. M. a gentle breeze ſprang up from the ſouth ſouth-eaſt; which freſhening, at three we got under weigh, and ſtood out of the Bay of Amoknak, at the mouth of which the ſhip's latitude, by bearings from the obſervations on ſhore, was 54° 8′, longitude 193° 17′ eaſt from Greenwich; variation of the compaſs two points eaſt; the volcano on Acutan bearing north-eaſt 62°, Oonalgi ſouth-eaſt 73°. We ſoon after ſaw Akoona to the north-eaſt. One of the natives here overtook us, and, wiſhing to accompany us, was taken on board with his ſmall baidar. At eight P. M. ſtood away north-weſt, with a freſh ſouth-eaſt breeze and foggy weather. At midnight the wind veered to north-weſt, and ſoon after increaſed to a gale, with flying clouds. At noon, our obſerved latitude was 54° 59′ 38″, corrected longitude 193° 1′. In the afternoon the wind became more moderate.

By noon of the 10th we had run 29 miles only, north-weſt 36° 57′. In the fore-part of the day, I begged Mr. Saretſheff to heave

heave the lead, upon a ſuppoſition that he would get ſoundings, which he did at 80 fathoms, mud and ſand, and in the evening at 75 fathoms. It had been very hazy all day, and continued ſo all the next day, with little wind at north north-weſt, and weſt by north. At noon of the 11th we ſaw ſeveral herds of ſea-lions ſporting, ſea-birds, and weeds floating. Our 24 hours run was north-weſt 49° 20′, 75 miles. Foggy and miſty weather continued all the afternoon. At night, having a freſh breeze ſouth by weſt, we cloſe-reefed our top-ſails, and, in hopes of ſeeing in the morning the iſlands diſcovered by Prebuiloff, laid-to with the main-top-ſail to the maſt. Saturday the 12th, early in the morning, we righted ſails, ſtood to weſt north-weſt, and ſaw land in the fog, bearing north north-weſt. At noon our latitude, by account, was 56° 59′, longitude 189° 45′, when the ſouth extremity of St. George's Iſland bore ſouth-eaſt 57°, diſtant 16 miles; and ſoon after we ſaw the iſland of St. Paul. Theſe iſlands appear hilly, though not mountainous; many vallies are diſcernible, covered with green plants, ſuch as are to be met with on all the Aleutan iſlands; but there is not a tree or a ſhrub upon the iſland, except ſome low berry-bearing buſhes from 12 to 16 inches high. A reef of rocks off the ſouth and ſouth-weſt ſides of the iſlands extends about three miles; ſome of them are diſcovered by the breakers, while others are conſiderably above water. They are not furniſhed with any harbour; but to the north-eaſt are bays ſhallow and expoſed, which, however, bad as they are, afford a landing-place to the hunters, whoſe firſt buſineſs is, to ſecure their veſſels by hauling them on ſhore. The weſt extremity of the iſland of St. George bears, by true compaſs, from the north point of Oonalaſhka north 39° weſt, diſtant 190 miles, trending eaſt by north, one-half eaſt 19 miles, and is about eight miles wide. Luchanin's company are now here; but by the accounts of the

native on board, and of others with whom we ſpoke at Oonalaſhka, they get but few animals. Drift wood is alſo ſcarce, which was plenty at the time when Pribuiloff firſt diſcovered theſe iſlands. This company of hunters have alſo a few hands with them from Oonalaſhka.

At eight P. M. the fog hid the land: we had a moderate breeze from the eaſt ſouth-eaſt, and our courſe was north-weſt one-half weſt, allowing two points; variation eaſt.

Sunday the 13th July, in the fore-part of the day, we had freſh wind eaſt ſouth-eaſt, and were going under an eaſy ſail north-weſt at ſix knots. At noon very hazy; latitude by account 58° 38′, longitude 188° 28′. The afternoon was hazy and miſty; and at four P. M. we had a moderate ſouth wind, which veered at ſeven P. M. to ſouth-weſt. We were ſteering north-weſt and by north, but, on account of night approaching, ſlackened ſail.

On the 14th we had a moderate ſouth ſouth-weſt breeze, with hazy and foggy weather, and kept our north-weſt courſe. At ſeven A. M. we ſaw in the haze land to the north-eaſt, which we ſoon after diſcovered to be Cook's Pinnacle Iſland, and ſtood in for it north by eaſt. At eight, the wind veering to ſouth ſouth-eaſt, we ſaw a rock in the fog right a-head, ſo wore ſhip, and ſteered two knots ſouth-weſt one-half weſt, when we again reſumed our former courſe. At ten A. M. ſaw Gore's iſland a-head, and ſoon after obſerved that it extended conſiderably weſt of the north. At noon, the meridian altitude in the haze gave the latitude 60° 30′ 50″, longitude corrected 187° 15′. Our diſtance was now about two miles from the ſouth-eaſt extremity of the land, trending north-weſt 61°. We ranged along the whole of

the ſouth-weſt ſide of the iſland at the diſtance above mentioned; and obſerved, that the land was moderately high, and that ſnow lay upon many of the higher mountains, the ſummits of which were hid in the fog. There were many bays, backed by low land, and ſome of them may, probably, afford good anchorage. The capes conſiſted of projecting promontories, with detached rocks extending out from 50 to 100 fathom. The vallies appeared very verdant; but the high land was barren and rocky. The extent of the iſland is 26 miles. Pinnacle Iſland lies due ſouth at the diſtance of eight miles, and is a remarkably barren rock, replete with lofty pinnacles, like ſtacks of chimneys, with detached rocks off it in every direction.

At the diſtance of four miles from the ſouth-weſt extremity of Gore's iſland, in a direction weſt by north, is another rocky iſland trending ſix miles north north-weſt. At four P. M. we entered theſe ſtraits, with ſoundings at 12 fathom, over a fine ſandy bottom. With a view of ſeeing whether the iſlands were inhabited or not, we came to anchor in the mid-channel, lowered our jolly-boat and baidar, and went aſhore on the weſtern iſland. We found a good landing-place in a ſmall bight behind a detached rock, which bore due weſt from the veſſel; the beach extending about 10 fathom from the perpendicular rocky ſhore, covered with drift-wood, the bones and tuſks of the walroſs or morzſh, the bones of whales, the back-bone, with ribs adhering to it, of ſome large animal (I ſuppoſe the white bear), and fragments of rocks; agates, and other pebbles, &c. The compoſition of the iſland ſeemed to be mountains of jaſper, ſome green and red, but in general yellow, veined with tranſparent ſtone like calcedoni. I aſcended one of the narrow chaſms in the rock to the top, which I found level, covered with moſs, and ſome ſuch low plants as I

had ſeen on the borders of the Icy Sea; foxes were numerous, of the black, red, and blue (or arctic) ſpecies. There appeared to me to be no earth upon the iſland, except the dung of animals, and of myriads of ſea-birds, whoſe ſhrill notes almoſt prevented our hearing each other ſpeak: theſe conſiſted of every ſpecies that we had ſeen on the coaſt of Kamtſhatka, and all the Aleutan iſlands. I am inclined to think, that the birds, their eggs, and the ſea animals caſt on ſhore, conſtitute the chief food of the foxes in the ſummer; and that early in the winter the ſtraits freeze over, when they paſs to the oppoſite iſland, which, from the verdant appearance of the low lands, ſeems likely to afford them edible roots for their ſupport during a long winter. I did not obſerve any fragments of ſhells of any kind on the beach, nor the leaſt traces of any inhabitants. This iſland is about ſix miles from north to ſouth; and, to judge from appearances, it is nearly ſquare in its form.

The oppoſite iſland is about 14 miles from north to ſouth; the ſhores everywhere broken and uneven, forming bays, bounded by projecting rugged cliffs, and detached pinnacle rocks.

Several white bears ſwam round the ſhip while we were at anchor, and three of them made many attempts to get up the ſhip's ſide; but at length they all ſwam to the large iſland. Captain Cook did not obſerve theſe ſtraits, but thought the whole was one iſland.

At midnight got under weigh, and on the 15th, with a gentle ſouth ſouth-weſt breeze, kept a northern courſe. Our ſoundings were now never more than 40 fathoms, having gradually decreaſed to that from 100 miles north of Oonalaſhka, where we had 80 fathoms.

fathoms. At noon we had hazy and foggy weather; latitude, by account, 61° 6′, longitude 187° 9′.

On the 16th, wind and weather continuing, we ſaw no land, and our ſoundings had gradually decreaſed by noon to 26 fathom, fine ſand. The laſt 24 hours run was 106 miles north-eaſt 27° 7′, making our latitude 62° 39, longitude 188° 54′. In the afternoon ſteered north one-half weſt. The evening being dark and miſty, we hauled the wind, the ſhip's head being weſt ſouth-weſt with a gentle ſouth breeze, to keep clear of Clerke's Iſland. Our ſoundings at midnight were 24 fathom, ſand and ſmall ſtones.

July 17. Wind ſouth-eaſt by ſouth, very foggy and miſty weather. At two A. M. we ſtood to the north. Our ſoundings decreaſed to 15 fathoms; ſhingles; and many birds were flying about the ſhip. At ſix A. M. ſoundings 12, 11, 10 fathoms, when we ſuddenly got the bottom with ſix fathom line. We immediately hauled the wind, which freſhened upon us, and ſtood ſouth by eaſt. In this direction we ſoon deepened our water to eight, nine, and ten, when it again ſhoaled to ſix fathom. We now conſidered ourſelves as embayed in Clerke's Iſland, and kept working to windward; the ſoundings regularly decreaſing on both tacks. At noon, our latitude was, by account, 63° 23′, longitude 189° 29′. Continued making ſhort boards till two P. M., when we brought up in ſix fathom, ſand and ſtones; but, the anchor not holding, we dropped a ſecond, and immediately after ſaw low land from eaſt north-eaſt one-half eaſt, to weſt north-weſt, diſtant in the neareſt place about three miles, which was immediately after hid again in the fog. The wind increaſed to a brisk gale, and the weather was miſty and rainy all night.

July

July 18. Being very ſqually, with ſhowers and heavy fogs, we got a ſpare anchor ready. At ten A. M. a hard gale coming on from eaſt ſouth-eaſt, we kept occaſionally paying out cable. About noon, the cable of the beſt bower parted, and we dropped our ſpare anchor in four fathoms, and payed out 15 fathoms cable, having only three fathoms at the ſhip's ſtern. As the gale continued, and no land was to be ſeen on account of the thick weather, we got a large ſpare anchor out of the hold, and belayed a cable to it in caſe of need. The night was very dark, with a rough ſea, and breakers juſt aſtern.

The 19th, at four A. M., the wind became more moderate, but the fog ſtill continued. The ſea being leſs agitated, we lowered our boats, and fiſhed up our beſt bower. At noon, in a moderate wind, we ſent a maſter's mate towards ſhore to ſound, and weighed the two ſpare anchors. We obſerved a current to the weſt at three quarters of a knot. The maſter's mate reported, that he found three fathoms pretty cloſe in with the ſhore, but that the ſurf was violent. At ſix P. M. the fog clearing up, we diſcovered ſeveral mountains covered with ſnow from weſt ſouth-weſt to north one-half eaſt, and low land to eaſt north-eaſt one-half eaſt.

Sunday the 20th, ſouth-eaſt by eaſt, a moderate breeze, hazy and miſty. At noon the weather cleared up a little, and we ſaw lofty mountains covered with ſnow ſouth-weſt by ſouth one-half weſt, and a peaked mountain, ſeemingly at a great diſtance beyond the high land north-weſt by north; our obſerved latitude being 63° 26′ 34″. At two P. M. we ſaw two men walking along the low beach, who made a ſtand oppoſite the ſhip, and, having ſomething hoiſted on a pole, waved it backwards and forwards.

wards. We immediately hoiſted our flag. Mr. Bakoff was ſent with the baidar on ſhore; but the breakers were ſo violent, that he could neither land nor get within hale; he therefore returned at ſix P. M. We obſerved the variation of the compaſs 24° 16′ 30″ eaſt. For the better trim of the ſhip, we filled ſix caſks with ſea water.

On the 21ſt we had little wind from the ſouth-eaſt, with rain at intervals. At noon Captain Billings and ſeveral gentlemen went on ſhore on the low beach. At eight P. M. a gentle breeze ſprung up from the north-weſt, and the weather cleared amazingly, I went to the main-top-maſt head, whence I could plainly ſee the ſpit of land, where the Captain went aſhore, join to a mountain bearing weſt by north, diſtant 10 miles, trending due eaſt about 17 miles, where it terminated, leaving a paſſage into the lake which appeared behind it, and upon which I perceived a large boat rowing toward the mountains. The extremity of this ſpit of land I computed at eight miles from the ſhip, in a direction eaſt north-eaſt one-half eaſt; and in the ſame direction three miles farther is a projecting mountain, which conſtitutes a part of the iſland, from which the land takes a circular ſweep north-weſt. to the top of the lake, continuing the circle to ſouth by weſt.

We now took the following bearings: the ſouth extremity of land, as far as we could trace a communication of mountains by low land, ſouth-weſt 50°, diſtant about 12 miles. The body of a mountain, which appeared a detached iſland, ſouth-weſt 32° 30′, about 20 miles. Another mountain, ſeemingly detached from ſouth-weſt 8° to ſouth 23° weſt, about 16 miles. The promontory neareſt the extremity of the ſpit of land north-eaſt 78°, from whence it took another circular ſweep to ſouth-eaſt 75°, where

where we perceived high land at about 10 leagues; but could not diſcern whether it was connected, or formed a ſeparate iſland; and ſeveral intervening mountains were in the ſame ſtate of uncertainty. At nine P. M. Captain Billings returned on board, and we immediately got under weigh. He ſaid, the ſea broke ſo violently on the beach, that it was with great difficulty they effected a landing; and the Oonalaſhkan, who had accompanied them in his ſmall baidar, had had it daſhed to pieces. Obſerving a foot-path on the ſpit of land which was only 20 yards wide, he walked along it, in hope of meeting with ſome of the natives at habitations which appeared at no very conſiderable diſtance. The ſhore was almoſt covered with the bones of ſea animals. He paſſed ſeveral dogs that were very tame; and, at the diſtance of about three miles from the landing place, he ſaw ſeveral ſcaffolds ſix feet high, evidently for the purpoſe of preſerving, and keeping out of the reach of dogs, &c. fiſh and ſea animals; but no habitations were near. The ſailors near the boats obſerved a very large baidar croſſing the lake from the vallies on the oppoſite ſide, containing, as they ſuppoſed, about 30 men. Upon ſeeing this boat, one of the men walked along the path which Captain Billings had taken; but, not ſeeing him, and the boat advancing very faſt, he fired his muſket, as a ſignal for the Captain; upon which the boat immediately ſtood back with all poſſible ſpeed. In conſequence, they had no intercourſe with the natives.

Thurſday the 22d, by five A. M. having ſteered ſouth ſouth-eaſt, eaſt, and eaſt by north, we made 23 miles ſouth-eaſt 79°, when we roſe more land a-head, and were fully convinced that all the mountains between which there ſeemed to be ſtraits, were joined by low land, The appearance, however, greatly juſtifies

Lieuten-

Lieutenant Synd in placing ſo many iſlands in theſe parts. Our glaſſes diſcovered all the vallies occupied by the buildings of the natives, and ſcaffolds for preparing or drying fiſh and the fleſh of ſea animals. Numbers of large boats alſo were hauled on the ſhores; ſo that this iſland muſt be very populous. By noon we were off the ſouth-eaſt extremity of the iſland, at the diſtance of one mile and a half; our obſerved latitude 62° 55′, having ſailed from our place of anchorage 43 miles eaſt ſouth-eaſt. We now doubled this cape, off which are two ſmall iſlands, the largeſt about one mile in length, narrow, and replete with huts and ſcaffolds; behind which we thought there was every appearance of good anchorage. The ſoundings were very uniform, according to our diſtance from ſhore; 12 fathom at the greater diſtance, gradually decreaſing, as we approached the land, to five and four fathoms at one mile and a half.

Having cleared this iſland, we ſtood north and north-eaſt about 20 miles, when the north-eaſt extremity of the land bore weſt, having a mountainous appearance, and terminating in a bluff-headed cape. [We did not ſee Anderſon's Iſland.]

The wind ſhifted to weſt ſouth-weſt, and we ſhaped our courſe north-weſt by weſt, with foggy weather. At noon our latitude, by account, was 63° 43′, longitude 192° 7′. The afternoon was hazy, with rain, and a gentle ſoutherly breeze. At eight P. M. the wind veered to north-eaſt, and ſoon blew hard.

The 24th we had a briſk gale from north north-weſt, on account of which we laid-to under main and mizen about three hours, when we ſtood away eaſt north-eaſt to get well clear of the eaſt of Clerke's Iſland, which would otherwiſe prove a lee-

ſhore, if the gale ſhould continue; and the very narrow eſcape that we had already experienced made us rather fearful of uſing too much freedom with this iſland. At noon we got the ſun's altitude in the haze, latitude 64° 4′ 26″. Afternoon cloudy: kept our courſe till midnight, with ſoundings at 19, 18, and 17 fathoms.

The 25th we had a hard gale north north-weſt with a rough ſhort ſea, and laid-to under main and mizen till noon, when we got the ſun's altitude; latitude 63° 26′ 23″, longitude, by account, 193° 20′. We now ſteered north north-eaſt under cloſe-reefed top-ſails, the wind north-weſt, making two points and a half lee-way, with 17 fathoms ſandy bottom. At 3° 47′ 25″, apparent time, the ſun and moon's diſtance made our longitude 192° 24′ 45″, latitude 63° 28′ 30″. At eight P. M. we wore ſhip, ſteering weſt by ſouth till the 26th, at ſeven A. M. when we ſaw Clerke's Iſland right a-head. The wind blowing from the weſt a gentle breeze, we let out all reefs, and ſet top-gallant ſails. At noon, our latitude, by account, was 63° 10′ 41″, hazy. In the afternoon, with light airs, we kept a northern courſe. On Sunday the 27th, in the morning, we had foggy weather, with little wind from the north-weſt. At eight A. M. it cleared up a little, and at noon we obſerved the latitude 63° 31′ 8″, longitude 192° 55′. The afternoon being clear, with little wind, we kept a courſe north-eaſt by eaſt all day. The 28th, a gentle breeze weſt by north, ſteering north by weſt. At ten A. M. we ſaw high land north-eaſt 7°, and low land north-weſt 10°. At noon the latitude obſerved was 64° 12′ 19″, Sledge Iſland bearing north-weſt 6°, diſtant 12 miles. At one P. M. the continent of America bore from north-weſt 55° to north-eaſt 35′. At four P. M. being about eight miles ſouth of the neareſt land, we caſt anchor in 12

fathoms; our latitude being 64° 20′, longitude, corrected from our laſt lunar obſervation, 164° eaſt, Sledge Iſland ſouth 78° weſt, diſtant nine miles, Cape Rodney north-weſt 75°, alſo nine miles.

Captain Billings ordered the boats out, and went on ſhore with the naturaliſt, draftſman, Mr. Bakoff, and Enſign Bakulin, with a few ſoldiers armed, beſides ſailors in the long-boat and ſkiff. We obſerved a current ſetting to the eaſt, at half a knot.

In the morning of the 29th we had very light airs from the weſt, with cloudy weather. At ſix A. M. a baidar containing nine of the natives rowed alongſide, and came on board upon the firſt invitation, leaving their arms in the boat, conſiſting of bows, and arrows pointed with green jade, calcedoni, and ivory; the bow ſtrengthened, and rendered more elaſtic, by the ſinews of the rein-deer, which were artfully bound round it. They had alſo lances about ſeven or eight feet long, ſome pointed with iron, but very few; the generality being pointed with the tuſks of the morzſh or walroſs very neatly cut. Upon one of them they hoiſted a bladder, which ſignal we anſwered with a flag, and they immediately came on board. They were well limbed, rather tall, had fine open and agreeable countenances, and were handſome and healthy. Their dreſs was very neat and clean; being half-boots, neatly embroidered about the inſtep with different coloured hair and ſinews, made of beautiful white leather, and tied round above the ancle with narrow ſlips of red leather, the ſoles made of bears' hide ſmoked; tight, well made pantaloons, alſo of leather dyed yellow or red; a very neat park, reſembling a carter's frock, reaching down to the knees, rounded before and behind, ſo as to form two flaps, and open at the ſides up to the hips. They wore no covering on the head;

and the hair was cut almoſt as ſhort as if ſhaven. They regarded every thing on board with admiration, but did not appear to be of a pilfering diſpoſition. I gave each of them a glaſs bead, and they immediately expreſſed great anxiety to obtain more, but had no articles of barter with them. They exchanged a few very neatly-made adzes of green jaſper, or jade, extremely ſharp; nor did they ſcruple to part with their arms, and even ſtripped themſelves, giving their clothes for beads, knives, &c. One of them by accident broke a ſmall pane of glaſs, which threw them all into a ſtate of diſmay. He immediately offered his lance by way of indemnification; but we made him underſtand that it was no loſs, by putting in another, and laughing at his concern, which pleaſed them all very much. They left us, making ſigns that they would ſoon return with ſome articles of trade for beads, &c. and paddled away towards Cape Rodney.

At ten P. M. the ſkiff returned with the Captain and Enſign. The long-boat, with the other gentlemen, did not get on board till the 30th towards midnight. The following account of their excurſion I tranſlated from the original remarks of one of the gentlemen in the party.

" We landed on a ſandy beach near the diſcharge of a ſmall " river; hauled both boats on ſhore; and made a fire with drift-" wood, which was in great plenty. The Captain, Mr. Bakoff, " the Doctor, and Draftſman, walked along a narrow path on " ſhore, quite unarmed; and at a ſmall diſtance from the boats, " we ſaw two natives coming toward us. When advanced with-" in a few fathoms, they made a ſtand; upon which beads were " ſhewn them, and a few thrown on the ground. They were " armed with lances, and advanced with the points toward us; " but

" but upon ſeeing the beads, and obſerving our ſigns of friend-
" ſhip, they turned the points of their lances behind them, and
" approached without heſitation. Upon the firſt ſight of the
" natives, our interpreters were ſent for, viz. the Oonalaſhkan,
" the American taken from Kadiak, and an Anadyrſky Coſſac,
" whoſe mother was a Tſhutſki woman. This latter they un-
" derſtood perfectly well, and, embracing him upon his ſpeaking
" the language of the Tſhutſki, we concluded that they were of
" that nation, and not Americans. We returned all together to
" the boats, and Captain Billings gave each of them a copper me-
" dal and a few beads. Shortly after we were joined by two other
" Americans, and obtained of them, for beads and a few uniform
" buttons, their bows, arrows, and lances. Upon their invita-
" tion we accompanied them to their dwelling, leaving only four
" men armed to guard the boats. The habitation was ſituated
" four verſts from our landing-place; and upon our arrival ſkins
" of rein-deer and other animals were ſpread for our ſeats before
" the fire. When we were placed, the hoſteſs preſented each
" with a thin ſlip of the ſkin of a marten, and immediately after
" with fiſh, and the meat of the deer boiled; but the intolerable
" ſtench of the hut took away all appetite on our part. It was
" dark when we arrived at the habitation; ſo that we knew not
" its extent, nor the number of its inhabitants; notwithſtanding
" the friendly behaviour of the natives, therefore, and though we
" were well guarded by our ſoldiers and ſailors, armed, and keep-
" ing a regular watch, we paſſed a ſleepleſs night.

" In the morning of the 29th we diſcovered that we were not
" in a village, but in the temporary tent of a ſingle family, pitch-
" ed for the ſake of fiſhing, and hunting wild-deer. The tent

" was

" was covered with leather, except on one ſide, which conſiſted " of the inteſtines of ſea animals for the admiſſion of light.

" At noon we returned to our boats, where, we were inform- " ed, ſeveral natives had been, and traded with the men, giving " them martens' ſkins, the river-otter, and foxes, for beads; and " that they invited them to their habitation, pointing out the di- " rection, which we followed, along a ſmall path of about five " verſts. When we arrived there, we were alſo treated with the " greateſt friendſhip, and received in return for our preſents, the " ſkins of martens, foxes black and red, lynxes, and gluttons. " Blue glaſs beads, iron, and metal-buttons, were their favourite " articles of barter.

" The Captain returned to the boats at ſeven P. M. where he " found the Enſign; and, immediately embarking in his ſkiff, " with him and four ſailors, rowed on board. Dr. Merck was " collecting plants and other natural curioſities; and the different " hands were ſcattered, ſome trading with the natives; ſo that " it was near dark before we were all collected.

" Mr. Bakoff bought a baidar of the natives, in which he " placed four ſailors; and, after taking ſome refreſhment, we " put off together. There was but little wind, and that was right " in our teeth. The ſea was rough, and the current againſt us. " We rowed about two hours, when the wind freſhened, and it " rained hard. Having a ſmall kedge on board, we brought up " to wait day-light, very wet and much fatigued, and had loſt " ſight of the baidar.

" At

MISCELLANEOUS

Fig.1 A Pick ax used by the Tshutzki made of the Tusk of the Morzsh. Fig 2 Stone Hatchet of America, with its Case Fig 4 Sepulchre of Oonalashka. Fig. 5. 6 & 7. Baidar Dress and Bow used by the Natives of both Continents at Berings Straits. Fig. 3 an Instrument used by the Tshutski.

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" At day-break it cleared up a little, and we ſaw the ſhip; " upon which we weighed, and took to the oars; but, the wind " freſhening with a head ſea, we made but little way; and after " ſix hours labour, the ſea breaking into the boat frequently, " which kept ſome hands conſtantly bailing out the water, all " wet and exhauſted, we hoiſted a ſail, and ſtood back for ſhore. " We ran on the ſandy-beach near our former landing-place, " cold, and almoſt helpleſs, with no means of making a fire; " but, to our inexpreſſible joy, ſome embers of the large fire " which we had made of the drift-wood were ſtill burning, and " theſe enabled us to dry ourſelves. At four P. M., both wind " and ſea being much abated, and pretty clear, we again puſhed " off, and reached the ſhip by midnight, but heard nothing of " the baidar, for the ſafety of which we were under great appre- " henſions *."

From our fears, however, we were relieved at four A. M. of the 31ſt, by her ſafe arrival on board. The ſailors ſaid, that rowing about in the dark and rain, without knowing where, they were caſt on ſhore about 10 verſts to the weſt of our landing-place; and that, notwithſtanding the violence of the ſurf, and the hollow waves, the baidar did not ſhip a ſingle ſea. They ſaid, that they were ſurrounded by the natives at day-light, and traded with them; but gave them a very bad character. I cannot gueſs what articles of trade they had; but they obtained ſeveral ſkins of black and red foxes, martens, &c. I hope that the natives had not the greater reaſon to complain.

* Captain Billings told me, that he ſaw very neat earthen pots, in which the natives dreſſed their food, and that they had bowls and buckets of wood, with wooden ſpoons; that he ſaw their armour, ſome made of wood, and ſome of bones, reſembling thoſe at Prince William's Sound.

At

At eight A. M. we weighed anchor with a gentle breeze from the ſouth, ſhaping our courſe weſt and weſt north-weſt; but, falling calm at two P. M., and getting into a current of one mile and a half weſt, we brought up between Sledge iſland and the main. A large baidar full of natives, and two ſmall ones, rowed alongſide; but before they came cloſe they ſang a ſong, and made ſeveral antic motions. In token of friendſhip, they had a bladder hoiſted on a pole; however, they would not be perſuaded to come on board, but exchanged ſeveral articles of curioſity for beads, &c. At eight P. M. we again got under weigh, with a gentle north-weſt breeze, which ſoon ſhifted to the weſt and weſt ſouth-weſt, with cloudy and hazy weather. At noon of the 1ſt of Auguſt, our latitude, by ſhip's reckoning, was 64° 40′; longitude, corrected from our obſervation of the 25th July, 192° 27′. At four P. M. we ſaw King's Iſland, which is very lofty; the ſummit broken and irregular; replete with pinnacle rocks; round in its appearance, and about five miles in circumference. We had a moderate ſouth ſouth-weſt breeze, and our courſe was weſtward.

On the 2d Auguſt we ſtood for the bay of St. Laurence. At nine A. M. ſaw the three iſlands in the mid-channel of Bering's Straits. Our latitude at noon was, by obſervation, 65° 23′ 50″, corrected longitude 190° 37′, when we ſaw the promontories on both continents, and the interjacent iſlands. At eight P. M. we took the following bearings: a promontory on the continent of America, north-eaſt 49°. Firſt iſland, north-eaſt 35°; ſecond, north-eaſt 18°; third, north-eaſt 9°. The eaſtern Aſiatic promontory north-weſt 29°.

We

We had variable light airs, and calms, with hazy weather, till Sunday the 3d, at ſix A. M. when a gentle breeze ſprang up from the ſouth ſouth-eaſt, which made us ply to windward, making ſhort boards for the bay of St. Laurence; till the 4th, at noon, when our latitude was 65° 37′, longitude 189° 18′. The wind ſhifting northerly, we ſtood into the bay, and at four P. M. came to anchor.

CHAP. XVIII.

Reception by the Natives.—An Adventure of the Author.—Singular kind of Encampment.—Barter with the Male, and liberal accommodation with the Female Inhabitants.—Diviſion of the Tſhutſki Nation into two Tribes; which are ſeparately deſcribed.—Captain Billings, with a Party, leaves the Ship for the purpoſe of a Land Excurſion acroſs the Country to the Kovima.—Tſhutſki Paſtimes, &c.—Captain Saretſheff, purſuant to order, ſails for Oonalaſhka, and anchors in the Harbour of Illuluk.—Captain Hall arrives.—Preparations made for a Winter's Reſidence.—Tribute collected.—Miſſion from Shelikoff's Eſtabliſhment at Kadiak.—Sketch of the Natural Hiſtory of the Iſland of Oonalaſhka.—A Hurricane.

We had no ſooner dropped our anchor than a baidar full of Tſhutſki came along-ſide, and ſhewed us a paper from Kobeleff, who (they ſaid) was now at the eaſtern promontory; and Dauerkin was with his relations toward Anadyrſk; but they added, that we muſt come on ſhore and give them ſome tobacco before they would let us have the paper. Captain Billings went on ſhore in his full uniform, and was received with every token of friendſhip and reſpect. Dauerkin was immediately ſent for, and our intercourſe with the natives was perfectly free and unguarded. On the 6th, at noon, Dauerkin arrived, with 12 large baidars full of Tſhutſki, whoſe numbers increaſed hourly. They had plenty of ſkins of foxes, martins, hares, and the muſk-rat of America, whence, indeed, they obtain the greateſt number of their furs,

boats,

boats, and arms, in exchange for ſuch articles as they get from Izſhiginſk, and from the wandering peddling traders about the eſtuary of the Kovima, &c.

On the 7th, I went on ſhore in uniform, but was not very well pleaſed with the reception that I met with. I had ſtrolled among the Tſhutſki to ſome diſtance from our tents and people, where one of the natives began to cut the buttons off my coat. I ſtruck him on the ſtomach with my fiſt, and he fell over ſome looſe ſtones behind him. One of our men (Vaſſiley Tolſtichen, a native of Anadyrſk), obſerving the tranſaction, ran towards me; the man got up and laughed, not ſeeming to be the leaſt offended at the blow. Tolſtichen told me, that they always inſulted little men, and ſuch as were leſs active than they. Upon hearing this, I challenged any one of them to run or leap. One of them offered to run with me to a point of land at leaſt a mile diſtant, and back again; this, however, I rejected, and propoſed running toward the boats, a little more than 200 yards. Arriving firſt at the goal, I received the pleaſing compliment of their acknowledging that I was, indeed, a man, though but a very little one. Not being inclined, however, to perform for their entertainment, I returned on board, fully reſolved not to quit the ſhip again ſo long as ſhe remained here.

The beach was now covered with the baidars of the natives, hauled on ſhore and turned keel upwards, one gunnel reſting on the ground, the other ſupported on their paddles: thus they ſerved the purpoſe of tents; and old dreſſed deer-ſkins ſewed together were uſed inſtead of curtains for the open ſide. Here the natives, men and women, ſlept indiſcriminately. The former traded with their dreſſes, furs, tuſks of the walroſs, whales' fins,

and pieces of the gut of rein-deer ſtuffed with chopped meat, marrow, and fat. The latter were extremely happy to grant any favours for beads, buttons, tobacco, &c. and that even in the preſence of the men, who actually introduced our people to the women when they had no other articles of trade. Theſe, however, were not their wives, but priſoners taken from their American neighbours, with whom they are frequently at war. The cauſe of the laſt affair between them was this: both parties meeting, on the chace of ſea animals, quarrelled; an engagement commenced, in which the Americans took one baidar and made the crew priſoners; the other, returning, procured a reinforcement, made a deſcent on the American coaſt, carried off a few women, and then peace was reſtored.

The Tſhutſki nation is divided into two very diſtinct tribes: the one is called Stationary, or fixed inhabitants of the coaſt; the other, Reindeer, or wanderers.

The former occupy ſuch places as are convenient for fiſhing and the chace of ſea animals, from the river Anadyr to a ſmall diſtance north of the eaſtern promontory. The extent of their population, according to the beſt intelligence that I could obtain, amounts to about 3000 males. Their chief habitations are about the bay of Anadirſk, particularly in the vicinity of Serdſi Kamen *, and in the gulph of Metchickma, which is between the

* Serdſi Kamen is a very remarkable mountain, ſituated in the north-eaſt part of the bay of Anadirſk, and projecting into it. The back or inland part is replete with cavities, whither the Tſhutſki fled when attacked by Pavlutſki. Here, ſecreting themſelves in the cavities of the rock, they ſhot great numbers of the Ruſſians on their paſſing by. Pavlutſki had at this time but a few of his followers with him, and returned to Anadirſk for a reinforcement; where he related, that the Tſhutſki ſhot his people from the heart of the rock; whence it acquired the name of Serdſi Kamen, or the heart-ſtone.

bays

bays of Anadirſk and St. Laurence. North of the eaſtern promontory the dwellings are but few, becauſe the ſea is not ſo prolific of fiſh, nor are there any foreſts; but the marine animals are more numerous, which is the cauſe of its being frequented on the chace; which ſometimes induces them to paſs the Shalatſkoi promontory into the Tſhaoon bay; which, they ſay, is about 15 days' journey from the eaſtern cape, ſleeping on ſhore every night. They were in this bay two ſeaſons waiting for our expedition from the river Kovima,—I ſuppoſe in 1787 and 1788.

They appear very induſtrious, and are neat workmen, which is evinced by their baidars, lances, arrows, bows, apparel, utenſils, &c. with which they ſupply the wanderers. They alſo trade with their female priſoners, receiving in return rein-deer, copper and iron kettles, knives, beads, and ſuch articles as the rovers obtain from the Ruſſian traders.

They dig cellars, in which they keep their ſupplies of food and oils. The proviſion conſiſts of dried meat of ſea animals and deer, roots, and berries. They regard the lips and ſnout of the morzſh, or walroſs, as a great delicacy when boiled almoſt to a jelly. The oil of the ſea animals they keep in ſeal-ſkins, and of this they obtain immenſe quantities; it not only being uſed for food, firing, and light, but alſo conſtituting a great article of commerce with the wandering tribe.

Kobeleff and Dauerkin have publiſhed very wonderful accounts of theſe people. Among other ſtories, they relate, that "the Tſhutſki, when aged or ill, require their friends to kill "them, which is immediately performed, as well with women "as men; and that a ſharp knife is the only remedy for all diſ-"orders."

" orders." But this they poſitively denied. I diſcovered by means of Tolſtichen, that the aged were ſubject to rheumatic complaints, which they cured by lighting the dried leaves of worm-wood, ſo prepared as to burn like tinder, and letting it remain till burnt out on the affected parts: a cuſtom alſo obſerved by the Yukagers, Tungooſe, and Yakuti. That if they had any ſwellings from wounds, ſplinters, or any other cauſe, they applied a poultice, compoſed of chewn edible roots, moiſtened with freſh oil; and in caſes of ſevere illneſs, offered ſacrifices of deer to the ſpirits of torture; and ſometimes a dog was killed, the ſick led round it, and anointed with its blood and fat. In caſe of death, the body is burnt to aſhes; ſtones are laid on the ſpot, to reſemble in ſome degree the body of the man; a large ſtone at the head, anointed with marrow and fat; and the horns of deer form a pile or heap at a ſmall diſtance. This place is viſited once a-year by the relatives, who recapitulate the feats and actions of the deceaſed, by way of remembrance, when each of them adds a horn to the heap, and anoints the head ſtone.

I was not able to learn any particulars of their religious rites and ceremonies, nor any remarkable cuſtoms. They reckon only two ſeaſons in the year, ſummer and winter; at the commencement of each of which they make ſacrifices and merriments, in gratitude for what is paſt, and as an invocation for future ſucceſs.

Kobeleff aſſerts, " that the wandering Tſhutſki make a practice " of lending their wives to ſtrangers, as a mark of friendſhip; " and that they frequently exchange them amongſt one another " for a ſhort time." This, however, is not the caſe; for theſe people are extremely attached to their wives and progeny; and if one of them were inconſtant to her huſband, ſhe would be

abandoned by all: nor can a greater odium be thrown on a Tſhutſki woman, than to ſuſpect her guilty of favouring a ſtranger.

The wandering tribe conſider themſelves as a ſuperior race of beings, and the moſt independent of men. They call all the nations that ſurround them old women, only fit to guard their flocks, and be their attendants; particularly the Koriaki. Reindeer are their only riches: theſe, and the ſkins of ſuch animals as they kill in their wanderings, they exchange with the Ruſſians, &c. for kettles, knives, and trinkets, which articles procure them arms, dreſſes, ſlaves, &c. from the ſtationary tribe. Their cuſtoms are alike, as is alſo their language.—This is all the intelligence that I could obtain of theſe people during my ſhort ſtay.

On the 12th Auguſt, Captain Billings, being completely ready to leave the ſhip, ſelected for his companions acroſs the country to the Kovima the following gentlemen:

Our naturaliſt, -	Dr. Merck;
His aſſiſtant, - -	Mr. Main;
Maſter, or Sturman, -	Mr. Batakoff;
His mate, - -	Mr. Gileeff;
Draftſman, - -	Mr. Varonin;
Surgeon's mate, -	Mr. Leman;
Tranſlators, - -	Dauerkin and Kobeleff;

Attendants, two ſoldiers, and the Captain's cabin boy: in all twelve. (Kobeleff, not arriving here in time, was to join the company at an appointed place on the road, at no great diſtance.)

Captain

Captain Saretſheff received directions to ſail to Oonalaſhka, to collect tribute from the natives of all the neighbouring iſlands during the winter; and early in the ſpring to proceed to Kamtſhatka, where Captain Billings ſaid he would join us. Similar orders were to be left with the inhabitants of the bay for Captain Hall, to be given him upon his arrival.

In the evening the whole party took leave of the ſhip's company and went on ſhore, intending to ſet out on their journey early the next morning. The immenſe quantity of articles that Captain Billings took with him for preſents, to ſecure the friendſhip of the Tſhutſki, and enſure his own ſafety, appeared to me more likely to have a contrary effect. However, he ſeemed convinced that there was no danger to be feared from the natives.

On Wedneſday the 13th Auguſt, early in the morning, we ſaw the baidars of the Tſhutſki launched, and loading with the baggage of our friends; and at nine o'clock they departed in fifteen baidars, taking with them our moſt ſincere wiſhes for their proſperity and ſucceſs. The proſpect, indeed, was but a melancholy one.

There were now only two families of the Tſhutſki left in their tent, and Captain Saretſheff and I went on ſhore. We ſaw ſeveral boys ſkipping with a rope, and learnt that this was a favourite exerciſe, and very cuſtomary among the young women, of whom two held a rope, one at each end, and while they ſwung it round, a third ſtood in the middle to leap over it. We alſo obſerved boys and girls jumping on a ſkin in the ſame manner as we had ſeen them on the iſland of Tanaga; but the ſkin in this inſtance was that of a walroſs, with proper handles made of thongs

for

for ſix or eight people to hold, which enabled them the better to catch and throw up the leaper. They alſo had a game of exerciſe reſembling priſoners-bars, and threw ſtones from a ſling with great exactneſs.

I ſaw a woman dreſſing a deer ſkin with the hair on: it was, however, the latter part of the proceſs; for it had been cleared of the fleſh and filaments that adhere when taken off the animal, and had been covered with a coat of wet whitiſh clay; which, being dry, ſhe was ſcraping off with a ſtone fixed in a piece of ſtick about two feet long, each end ſerving for a handle: the ſtone had a rough but not very ſharp edge, and the ſkin was faſtened to a board. The whole proceſs is exactly the ſame as is practiſed by all the Aſiatic Tartars. For farther particulars concerning theſe people, I muſt beg leave to refer my readers to ſome remarks taken from the memoranda of Captain Billings's companions in his land excurſion through their country, and which will be found in a future chapter.

The Tſhutſki call Clerke's iſland E-oo-vogen; and ſay, that it is the ſame diſtance from the north eaſtern cape of the bay of Anadirſk, or Tſhukotſkoi Noſs; as is Kygmil (Cape Prince of Wales) from the eaſtern promontory; that they paſs over in a day, and the iſland is extremely populous.

We made the diſtance between the two continents 48 miles, the eaſtern promontory bearing north-weſt 42° from cape Prince of Wales, and the bay of St. Laurence from the ſame point weſt by north 62 miles, by true compaſs. The three interjacent iſlands are called, the firſt Inalin, from the eaſtern promontory 24 miles, bearing ſouth-eaſt 26°. Six miles farther, in a direction

eaſt by north, is the ſecond and largeſt, Imaglin. Okivaki is the third and ſmalleſt, 10 miles diſtant, ſouth by eaſt.

King's iſland they call Okiben, and Sledge iſland Ayak. The bay formed by the two capes, Prince of Wales and Rodney, is named Imagru, the deepeſt part of which is the diſcharge of a conſiderable river called Ka-ooveren; near the ſource of which, the natives ſay, the country is well wooded. Kobeleff, ſpeaking of a river in the vicinity of this place, relates, that on its border is a ſmall town containing a church and oſtrog, built and inhabited by Ruſſians. He ſuppoſes them to be the remains of the ſhipwrecked companions of Deſhneff, a Ruſſian adventurer who left the river Lena with ſeven veſſels in 1648, and, having ſailed round the land of the Tſhutſki, arrived at Anadirſk alone, the other ſix veſſels being never afterwards heard of *. Notwithſtanding all my endeavours, I could not find any body that knew aught of this matter, or had ever heard of any ſuch place exiſting.

At noon we returned on board, and immediately got under weigh. The Tſhutſki had promiſed to give Captain Saretſheff ſome freſh meat in the bay of Metſhikma; but he obſerved, as we paſſed this bay in the afternoon, that he could not weather the ſouthern cape, if he entered with the preſent wind from the eaſt of the north; he, therefore, thought it more prudent to purſue his voyage, than riſk the encountering any difficulties for the ſake of a ſmall quantity of rein-deer meat. He conſidered the time alſo of too much conſequence to be trifled with, the more eſpecially as we had but a very bad ſupply of fire-wood on board,

* For a particular account of this adventure, taken from original papers, ſee Coxe's "Ruſſian Diſcoveries."

and

and were deſtined to paſs the winter at Oonalaſhka, which place produces none, except the ground willow, not exceeding the thickneſs of a walking ſtick, and that only in a very few detached places between the mountains, difficult of acceſs: a circumſtance which made it abſolutely neceſſary for us to endeavour to procure ſome on our paſſage, if poſſible. We had ſeen a conſiderable quantity drifted on the beach of Gore's Iſlands, and this appeared the moſt eligible place at which to procure it. The reſolution, therefore, was taken, to direct our courſe for this place. The weather was very foggy; ſo that we paſſed the weſt ſide of Clerke's iſland, and to the eaſt of the promontories that form the capes to the bay of Anadirſk, without ſeeing land. The wind continued from the north-eaſt, and the weather remained wet and foggy; ſo that we paſſed Gore's Iſlands without getting a ſight of them. Nor did we dare venture an attempt to approach too near. Conſidering our preſent ſituation, nothing but Captain Saretſheff's anxiety about Captain Hall and the gentlemen left at Oonalaſhka, prevented his ſteering direct for the harbour of St. Peter and St. Paul in Kamtſhatka. This alone induced him to take the reſolution of ſteering direct for the iſland of Oonalaſhka, which was the firſt land that we made, and this we reached on the 29th Auguſt, when we anchored in our old place in the harbour of Illuluk.

We were now informed, that Captain Hall arrived here a few days after our departure, and, having taken on board the gentlemen, ſtores, &c. left for him, had followed us to the bay of St. Laurence. We were, therefore, in hourly expectation of his return; and on the 31ſt he appeared in the offings, and the next day (the 1ſt of September) came to anchor along-ſide. We had hauled our ſhip into a little cove behind a ſmall rocky iſland. It

had the appearance of a pond 25 fathom wide, and 150 fathom in length; the north-eaſt bounds were low land, but in every other direction lofty mountains. Four anchors were carried aſhore, two on the ſtarboard, and two on the larboard ſide, from the head and ſtern; and two cables were belayed to each anchor. The ſmall veſſel, which Captain Hall had named the Black Eagle, was moored along-ſide, at the diſtance of 20 feet. Theſe precautions were taken in conſequence of the natives telling us, that the ſqualls in winter were very violent, particularly in this part of the iſland. Here we laid up our veſſels for the winter, and built a ſhed on ſhore, of yards, top-maſts, &c. covered with ſails, in which we kept the articles and proviſions that were landed. We alſo erected a working ſhed of ſods, thatched with ruſh graſs, for the ſail-maker, carpenter, block-maker, &c. The roof was formed of ſpare yards, ſpars, and oars; and the window-frames were conſtructed of old caſk-ſtaves. This building alſo contained two ovens for baking bread, &c. The commiſſary, or rather purſer, Mr. Erling, a Ruſſian, and I, built a ſmall hut nearly in the ſame manner; the inſide of which we lined with whales' fins. The captains of both veſſels, and other officers, retained their births on board; as did alſo the greater part of the crew; for the habitations of the natives were ſo ſmall, and formed ſo entirely without conveniencies, that none of our ſailors or petty officers choſe to take a birth among them. Their neareſt village was that of Illuluk, about a mile from the veſſels; and that conſiſted of four or five huts, pretty deep under ground; the tops of which were overgrown with graſs and weeds, and preſented an appearance reſembling heaps of earth: the entrance was at the top, through a ſmall ſquare hole, which alſo ſerved for the admiſſion of light, and the diſcharge of ſmoke. The want of fire-wood and other timber precluded the poſſibility of erecting barracks; and the account

which

which the natives gave of the mildneſs of the climate juſtified the choice of the veſſels, which were the more convenient habitations. Beſides, it ſecured to all hands the rations of proviſion and brandy, which are allowed only at ſea or in a foreign port.

We had conſtantly ſome party or parties out in our boats, collecting the drift-wood on the beach, which, however, was in general ſo ſodden with ſea water, that it would not burn; and they were fortunate if during the day they collected a day's ſupply. Theſe parties were furniſhed with muſkets and ammunition for ſhooting wild fowl, which were alſo ſcarce and ſhy. Numbers of hands were alſo ſent inland to cut the ground-willows.

The natives having been informed, before we departed for the land of the Tſhutſki, that we ſhould return to paſs the winter on this iſland, had caught and dried a quantity of halibut, cod-fiſh, and ſalmon. They had alſo collected a conſiderable quantity of berries in caſks which were left with them for that purpoſe; and every poſſible precaution had been taken to ſecure freſh proviſion for the winter; for our ſalted beef no longer poſſeſſed its nutritive juices, and our dried bread was almoſt exhauſted: but we had with us a conſiderable ſupply of flour; ſo that we only wanted fire-wood to bake it.

We now formed among ourſelves a little republic, in perfect congeniality of ſentiment, complete friendſhip and harmony; equal in our manners and way of living; uncontrolled by ſeverity, yet obſerving ſtrict order and ſubordination. I may ſay, that the poſſeſſions, even the purſes, of each were ſubſervient to the wants of the other. Our ſociety conſiſted of, Captains Robert Hall, Gabriel Saretſheff, and Chriſtian Bering; our ſurgeon-

major

major Robeck; ſurgeon Allegretti; Meſſrs. Bakoff, Bakulin, Erling, Pribuiloff, and myſelf.

Having thus deſcribed our ſituation and arrangements, I ſhall proceed to our occupations. The natives were informed, that our orders were, to collect tribute, and to receive ſuch as they voluntarily choſe to give as an acknowledgment of their ſubjection to the Court of Ruſſia; but that we were not authoriſed to exact any thing beyond what they could conveniently ſpare; at the ſame time they were deſired to bring the receipts for the tribute which they had given to the hunters, or Ruſſian Promyſhlenicks. Several of the inhabitants immediately brought black and red fox-ſkins, and received preſents for the ſame, more in their eſtimation than equal to the value. In their fiſhing parties they fell in with the natives of other iſlands, and communicated the intelligence; ſo that this part of our buſineſs was known to all the natives of the weſtern iſlands, and to thoſe eaſtward as far as to Kadiak, from which iſland Shelikoff's eſtabliſhment diſpatched to us two of their companions, who were eſcorted by numbers of the natives of the different Aleutan iſlands and of Kadiak *. The object of their miſſion was, to requeſt a ſupply of medicines (with directions how to uſe them) for the venereal diſeaſe, which had arrived in their different ſettlements at an alarming height. They alſo were in want of many common neceſſaries, as tobacco, brandy, &c.; of the latter articles we could not ſend them any, Captain Billings having left us but a very ſcanty ſtock; but of medicines our ſurgeon-major ſent as much as he could

* I took this opportunity to prove the correctneſs of my Vocabulary, and to make particular inquiries about Alakſa; which they aſſured me was not an iſland, and that I muſt have been miſtaken in ſuppoſing they called it a Kichtack; that no ſtraits exiſted; but that they frequently carried their boats acroſs a narrow neck of land, and went down a river to the north ſide of this point of land.

poſſibly

poſſibly ſpare, with proper directions for uſing them. Numbers of the natives of the Aleutan * Iſlands, who accompanied the miſſion, complained of the treatment they met with, and wiſhed to return to their homes: to the beſt of my recollection, they were liberated; the hunters, however, were told, that they muſt be anſwerable for the tribute of ſuch as they kept in their employ, as alſo for the manner in which they treated them.

Shortly after our arrival at this iſland, ſeveral of our hands were afflicted with the ſcurvy, but in a ſlight degree; and ſuch as choſe to reſide on ſhore were allowed a birth in the working-ſhop. We had malt, hops, and a conſiderable quantity of eſſence of ſpruce; and beer was brewed for the benefit of all hands, eſpecially the ſick. Berries were alſo adminiſtered, and every antiſcorbutic that we could procure; but we did not perceive that any good aroſe from it.

The ſhocking accounts that we had heard of the ravages which the ſcurvy had made among the different hunters who had paſſed the winter on this iſland, and particularly the crew of Levaſheff's veſſel, who commanded the ſecond ſhip in Captain Krenitſin's expedition in the year 1768 †, made every one of us dread the effects of this fatal diſeaſe; and, thinking the beſt way to guard againſt it was, to copy the natives in their mode of living, I made the chief part of my diet conſiſt of raw fiſh, muſcles, and limpets; uſing, inſtead of tea in the morning, a tea-

* By the Aleutan Iſlands, I mean the whole chain from the point of Alakſa weſtward to Kamtſhatka, except Bering's and Copper Iſlands.

† This officer loſt almoſt all his hands by this dreadful diſorder; nor could he ever have left the iſland without aſſiſtance of men from Krenitſin's veſſel, who had paſſed the winter in the ſtraits of Alakſa.

ſpoonful

ſpoonful of eſſence of ſpruce in a ſmall tea-kettle full of boiling water; and in the evening, we boiled beer with berries, ſugar, and pepper, which, with the addition of ſome corn-brandy, was our ſubſtitute for punch.

I alſo daily collected a ſufficient quantity of wild creſſes to afford a ſallad for our meſs; and on Sundays procured enough for the whole company in the cabin. Two or three times a week I obtained alſo freſh fiſh, by frequenting the rocks at low water, which were overflowed at flood; and theſe I caught by the following ſtratagem: I baited a fiſh-hook with a raw muſcle, and thruſt it into the holes, or rather cavities, in the rocks: the fiſh lurking under theſe ſtones took my bait, and I by theſe means ſometimes in the courſe of half an hour caught half a dozen fiſh: the ſorts were—the wraſſe, the father laſher, a large ſpecies of the blenny, and the turpug. [For a particular deſcription of ſome of theſe fiſh, I refer my reader to the APPENDIX.] The other fiſh are halibut, cod, two or three ſpecies of ſalmon, and ſometimes, but very rarely, the tſhavitſha, a ſpecies of ſalmon very common in Kamtſhatka, about Neizſhni, between four and five feet long; alſo thornbacks and flounders. The ſhell-fiſh are—different ſpecies of crabs, the ſmall pearl oyſter, muſcles, cockles of an immenſe ſize, wilkes, periwinkles, a great variety of edible limpets, and the cuttle fiſh.

The birds that I obſerved were—two ſpecies of geeſe; one termed by the Ruſſian hunters laidenoi. Theſe appeared on the 31ſt Auguſt, two days after our arrival, and wintered here. The head, neck, and breaſt, are white; it has a large black ſpot on the throat; back, wings, and tail, aſh colour; the extremity of the feathers barred with a black ſtreak edged with white; bill

and legs yellow; claws black. They remained here until the 18th April, and on the 19th the other ſpecies arrived, which I have deſcribed at Kadiak, where we obtained ſome: theſe depart about the 30th of Auguſt. Toward the latter end of September a few of the ſnow-buntings came, but only ſtayed a few days.

The ſafka, a kind of duck very frequent in Kamtſhatka, made its appearance at the beginning of October, and wintered. The 12th November we ſaw the turpan of Ochotſk; but theſe ſtayed only a few days, and were in very poor condition. There is alſo a ſpecies of bunting with a red head and breaſt; but of theſe I ſaw only two or three; they are much ſought after by the natives, who ornament the ſtrings to their darts and dreſſes with the red feathers: alſo a bird as ſmall as a wren, which emits a delightful note: theſe and the ſafka, indeed, are the only melodious birds on the iſland. Here are alſo a few partridges, teals (tſhirok), cormorants (urili), awks (ari), ſea parrots (toporki), and gulls (tſhaiki). A very large ſpecies of the gull kind was killed by a party collecting drift-wood in the beginning of April. They had retired to a cave to refreſh themſelves, when this bird, purſued by an eagle, took refuge among them. The wing had three joints, one more than I ever ſaw in any other bird. The Ruſſians call them Semi Sazſhenoi (ſeven fathom), from the extreme length of their expanded wings. They are frequently ſeen, but the natives have never found their neſts or eggs. When picked, it appeared very like a large turkey, and, to our depraved taſtes, was not inferior in quality when dreſſed. Eagles are numerous, as are alſo the glupyſh, which I take to be Pennant's fooliſh guillemot.

The only animals that I ſaw were foxes and mice; the latter, I obſerved, generally choſe the ſouthern ſide of the mountains for their burrowing places, and the freſh ground thrown up by them were the ſpots from which I collected the wild creſſes.

The morning of the 1ſt of April 1792 being clear, I roved about the ſouth ſide of the mountains to enjoy the ſun, which we had not ſeen ten times ſince our arrival on this iſland. During my walk, I ſaw, at the entrance to one of the mouſeholes, a conſiderable quantity of edible roots: theſe conſiſted of makarſhine, ſarana, and another root unknown to me, about the ſize of a coffee bean (but few of them): the quantity might be about ten pounds weight, thus brought into the ſun to dry by the mice, more provident than the human part of the inhabitants of this iſland. I alſo noticed, for the firſt time, that the ſweet plant of Kamtſhatka, the kutagernik, or wild angelica, the broad-leafed ſorrel, and kiprey, were breaking through the earth. The other productions of the iſland are, the ground willow, already deſcribed (but not a ſingle tree of any denomination whatever, nor does any of the iſlands weſt of Kadiak produce a tree of any kind: this I can poſitively aſſert); two berry-bearing buſhes, the tſhernika and golubnika, about eighteen inches high, on the ſouthern ſide of the mountains, and in ſuch places as are ſheltered from the north winds; the mountains alſo produce the ſhikſhu, or ſiecha, and wortle-berry. The vallies yield raſpberries, white, large, and of a watery taſte. The edible roots are, ſarana, makarſhina, and the root of the lupin; this plant bears a more beautiful flower than in Europe: the kutagernik is ſometimes uſed for food, mixed with fiſh ſpawn, I believe on account of its bitter flavour. Wild muſtard was plenty about the old habitations.

tions. The graſs is coarſe and ruſhy; I am inclined, however, to think its quality ſucculent; for it appears to me of the ſame kind as grows about the harbour of St. Peter and St. Paul in Kamtſhatka, of which the cattle are very fond, and it fattens them extremely. The ſoil is not deep, but black and fine, unmixed with clay or loam. It was with great difficulty that we procured, near the ſource of a rivulet, a ſufficient quantity of clay to uſe as cement to our ovens, built with the ſtones collected on the ſea-ſhore. Here are no rivers; but ſeveral rivulets, or ſmall rills of water, run into the ſea. There are two extinguiſhed volcanoes on this iſland; and near one of theſe there was formerly a hot ſpring, but it is now buried under ſtones fallen from the mountain, which produces abundance of native ſulphur. Earthquakes are frequent, and, by the account of the natives, ſometimes very violent.

The ſea produces, beſide the fiſh already mentioned, whales, grampuſſes (koſatki), porpoiſes (ſwinki), the ſea lion (ſivutſha), and the urſine ſeal (kotic); the two latter uſed to paſs this iſland in great herds late in the autumn; but they have not appeared the two laſt years, which I attribute to the havock made among them by the hunters on the iſlands diſcovered by Pribuiloff to the north of Oonalaſhka. Sea otters are almoſt forgotten here; but they ſometimes appear on the rocky iſlands off Atcha.

I ſhall now return to our ſociety. We had but little to do during the preſent year. Our foraging parties met with very ill ſucceſs, although they were of material aſſiſtance with the little fire wood that they obtained. They could not ſhoot any game, which I aſcribe to their being too numerous and noiſy: for I was ſucceſsful when I went out alone, but found the wild fowl exceedingly ſhy. We experienced a conſtant ſucceſſion of miſts

and fogs; ſometimes during the night the ſtars appeared; we had frequent gales of wind, and very ſtrong, and encountered one hurricane, which, probably owing to the ſurrounding lofty mountains, acted like a whirlwind upon our veſſels, carried the Black Eagle on ſhore, and, catching the Slava Ruſſia, all her cables parted like pack-thread at one inſtant; but, notwithſtanding ſhe was at the mercy of the gale, and in great motion in the eddy of the wind, its oppoſite currents only drove her a ſhort diſtance along the baſin, and back again. We expected her every moment on the rocks; the violence of the hurricane, however, abated, and we again got her to the old moorings, without having received any damage. Several of our men were laid up with the ſcurvy towards the end of the year, and we buried one young man, whoſe death was occaſioned by this diſorder; he had reſided on ſhore from the time of our arrival.

CHAP.

CHAP. XIX.

Deplorable ſtate of the Party under the Effects of the Scurvy.—Attention and Services of the Natives.—Sketch of the Religious Notions, Government, Arts, Manners, &c. of the Natives of the Aleutan Iſlands.—Mode in which the Ruſſian Hunters carry on their Concerns.—Quit the Iſland, and arrive at St. Peter and St. Paul.—Find there the Alcyon, Captain Barkley, from Bengal, who, though having on board Articles of the firſt Neceſſity, which he offered at a very low Price, was forced to return without having diſpoſed of any.—Reflections of the Author on Ventures of this kind.—Better Succeſs of a former Adventurer, Captain William Peters, in 1786.

THE year 1792 had commenced with the moſt inauſpicious proſpects that the imagination can conceive: except myſelf, I believe, every one of our Company was affected more or leſs with the ſcurvy; ſome without any other outward marks than a ſallow complexion, accompanied with ſhortneſs of breath, and an extreme laſſitude of the whole frame, which prevented their taking ordinary exerciſe, or even walking far; ſome had ſmall livid pimples all over the body, particularly about the legs, with ſoreneſs and violent itching; ſome had large livid blotches on their legs, arms, and other parts of the body; ſome were bloated all over, and almoſt all had their gums ſwollen to ſuch a degree, that they nearly hid their teeth. Thus ſituated, it was with difficulty that we could muſter able hands enough to hoiſt a caſk of water on board.

The natives exerted themſelves to procure fiſh; and, when the weather prevented their aquatic excurſions, they collected bundles of willows for firing. The buſineſs allotted to me was, the receiving of tribute from the Aleutans, diſtributing preſents, and giving returns for whatever they brought us. When not employed about this buſineſs, I was ſtrolling over the mountains gathering creſſes, or at low water along the ſea-ſhore, fiſhing among the rocks, or getting limpets, muſcles, &c. The birds were ſo ſhy, that I could but ſeldom ſucceed in ſhooting any. I was always alone; for, though ſeveral gentlemen frequently attempted to walk with me, they very ſoon became tired, and returned, leaving me to purſue my ſolitary perambulation.

The proſpect before us grew more melancholy as the ſeaſon for our departure advanced. More than three-fourths of our Company were confined to their hammocks by the ſcurvy; but our Surgeon, Allegretti, was among the number of thoſe who, with the aſſiſtance of crutches, were enabled to move from place to place; and he, with Mr. Bakulin, was taken into our hut. Notwithſtanding every poſſible method was adopted by our ſurgeons to check this diſorder, it raged with unabated violence; and, toward the latter end of the month of February, we ſometimes buried three men in one day; and the moſt athletic in appearance were the earlieſt victims. It was equally deſtructive to thoſe who dwelt on ſhore, as to thoſe whoſe birth was on board ſhip. At this time we began to doubt the poſſibility of ever leaving the iſland. I ſtill continued my walks, but found ſome difficulty in rambling over the mountains: it certainly fatigued me more than uſual; but I did not on that account ſhorten my excurſions.

Early

Early in the month of March, the wind, which had hitherto blown from the northern quarters, veered to the ſouthward; although rainy and miſty weather continued during the day, the fogs were leſs, and the nights more clear. We now obſerved, to our inexpreſſible joy, that the mortality ceaſed; that thoſe who were violently afflicted with the ſcurvy did not get worſe, and that no more were laid up; and, ſoon after, appearances indicated returning health. The inhabitants of the iſland, with the natives who brought us their tribute, alſo ſupplied us with abundance of halibut and cod; the wild muſtard growing about the habitations was gathered, and diſtributed to the different meſſes; and we again revived, in hopes of better days than this iſland could afford.

During the winter, I had frequent opportunities of reading my vocabulary (taken in 1790 in the iſland Sithanak) to the natives, who underſtood every word; and, therefore, I think I may venture to pronounce it pretty correct: on all the Aleutan iſlands the *th* is pronounced exactly as in England.

Of their religion I am not able to give ſo particular an account as I could wiſh, owing to their extreme ſuperſtition; for they believe, that the kugahs, or demons, of the Ruſſians are more powerful than theirs; and that, ever ſince theſe viſitors came among them, they have been ſubjected to the greateſt ſlavery and diſtreſs; that if they have only mentioned their real name, it has been a ſufficient means to lead to their diſcovery and torment. "Some of us have even adopted their method of worſhip *, in "hopes of ſoliciting the protection of their kugahs, but without

* I have here taken the very words of the Aleute interpreter Eliſey, who was chriſtened; to which ceremony he alludes.

"producing

"producing any ſalutary effects." The natives imagine, that the curioſity which their viſitors expreſſed of ſeeing every ceremony was merely with a view of inſulting their kugahs, and inducing them to withdraw their protection; by which means they ſuppoſe them to have ſucceeded in compelling ſubmiſſion. The want of employment for their minds increaſes their ſuperſtition, and they carefully avoid diſcovering their magicians, or explaining any meaning in their ceremonies. They ſtill obſerve their annual dance in maſks, and with painted faces; the maſks are called kugahs; and I diſcovered, that ſome particular ornaments of their dreſs uſed upon this occaſion were regarded as charms, having power to prevent any fatal accidents, either in the chaſe or in their wars; but in the latter they now never engage. We were informed that the greater part of the inhabitants of Sithanak had been victims to illneſs ſhortly after we left the iſland in 1790.

According to the beſt intelligence that I could obtain of the population of all the Aleutan iſlands, the number of males (including children) does not exceed eleven hundred, of which number about five hundred of the moſt active are employed by different parties of Ruſſian promyſhleniki, or hunters. Formerly, one village on this iſland contained more than the above number. At that time they had one chief preſiding over the whole iſland, whom they called Kikagadogok, being choſen by the natives from among the Tokok * or Dogok, chiefs of villages (for it is pronounced both ways at different iſlands). The reſt are vaſſals, diſtinguiſhed by the name of Talha. They ſay, that

* I have obſerved, that the chiefs of villages are called by ſome of the Ruſſians Tookoo; by others Toyon. Whence they obtained the name of Tookoo I know not; but Toyon, or Toigon, is the proper Yakut name for Chief.

mankind

Drawn by W. Alexander.

Engravid by W. Cooke.

Masks used by the Oonalashkans in their Dances, with the Darts used by the same people; and the two sides of the board from which they are throun.

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mankind were the offspring of dogs by the command of Aghuguk; and that all of them came from the weſt, where they ſuppoſe there exiſts an immenſe and very populous country.

Although they formerly had places wherein to depoſit the produce of the chaſe, they never were accuſtomed to lay in a ſtock for the winter; for they only preſerved their food until it came to their turn to feaſt. As, however, at that time, the iſlands were populous, and their villages extenſive, this method was nearly the ſame thing; for the different villages viſited each other in regular rotation, and were gueſts until the whole quantity that they had collected was exhauſted, which was not till their fiſhing ſeaſon re-commenced, when their magicians and the kikaga-dogok were conſulted, and commenced their incantations for new ſucceſs in the enſuing ſeaſon, aſſuring their kugahs that nothing had been waſted of their former bounty.

They fiſh with bone hooks. The lines are either a remarkable ſpecies of ſea-weed * ſeventy fathom long, or the fins of whales cut very thin and even †. Their darts for animals are coloured, ſome red and others black; for they have different coloured paints, or earths, which they mix with oils of fiſh; as white, blue, red, and black. Theſe they obtain from a mountain near the village Amada; but where that is ſituated I know not.

The capacity of the natives of theſe iſlands infinitely ſurpaſſes every idea that I had formed of the abilities of ſavages. The or-

* A ſpecimen of which is now in the poſſeſſion of Doctor Rogers, with ſeveral other Aleutan curioſities.

† The natives, when fiſhing for halibut in 70 or 80 fathom water, frequently haul up with the line beautiful white ſticks and their roots. Theſe are from ſix to eight feet long, very thin, and without bark or branch. When firſt taken out of the water they are as elaſtic as whalebone; but, when kept a conſiderable length of time, they reſemble white coral, and are brittle.

der eſtabliſhed among them, and their ſubordination to ſuch chiefs as they have ſelected for their rulers, certainly originate from principles of adoration which they poſſeſs for an exiſting inviſible Superiority, and govern their conduct with that propriety which ſeems moſt likely to attain ſecurity and protection, both in this world and in the next; for they firmly believe in another world, and imagine that ſuch as live in conformity to the will of Aghuguk will there obtain all neceſſaries with little trouble, and not be under the control of the kugah. Their behaviour, therefore, is not rude and barbarous, but mild, polite, and hoſpitable. At the ſame time, the beauty, proportion, and art with which they make their boats, inſtruments, and apparel, evince that they by no means deſerve to be termed ſtupid; an epithet ſo liberally beſtowed upon thoſe whom Europeans call ſavages. It is much to be lamented, that they are under the ſway of the roving hunters, who are infinitely more ſavage than any tribes that I have hitherto met with; nor do I ſee any means of checking their outrages; for the authority of government can never reach theſe diſtant regions: the only proſpect of relief appears to me to conſiſt in the total extirpation of the animals of the chaſe; and I think I may venture to ſay, from the daily havock made among them, that a very few years will ſerve to complete this buſineſs.

As I have ſo frequently mentioned the hunters, a ſuccinct account of their proceedings may perhaps not prove unintereſting to my readers.

Their galliots are conſtructed at Ochotſk, or at Neizſhni Kamtſhatka; and government, with a view of encouraging trade, have ordered the commandants of thoſe places to afford as much aſſiſtance as they can to the adventurers; beſide which, the materials

of

of the very frequently wrecked tranſport veſſels, though loſt to government, are found the chief means of fitting out ſuch an enterpriſe, and greatly leſſen the expence. The ſailors agree to the diſtribution of ſo many pais (ſhares) among them, in lieu of wages: thus their veſſels are procured and manned. The cargo conſiſts of about five hundred weight of tobacco; one hundred weight of glaſs beads; perhaps a dozen ſpare hatchets, and a few ſuperfluous knives of very bad quality; an immenſe number of kleptſi (traps for foxes), and a ſmall ſtock of proviſion, conſiſting of a few hams, a little rancid butter, a few bags of rye and wheat flour for holidays (for they do not make a practice of eating bread every day), and a conſiderable quantity of dried and ſalted ſalmon. They are alſo ſupplied with a few rifle-barreled guns, and a quantity of ammunition, for their defence againſt the natives.

Being thus equipped, with ("Bozſhe Pomotſh") God's help they go to ſea. Upon their arrival at any of the inhabited Aleutan iſlands, they formerly uſed to take a number of women and a few men as hoſtages; but now they take poſſeſſion of the village, and, after hauling their veſſel on ſhore, diſtribute their kleptſi to the natives to catch foxes, and ſend out parties to collect firing, to fiſh, and to chaſe ſea animals. Some of the hunters go to the contiguous iſlands, and exact the ſame obedience from all, while they themſelves live in indolence and eaſe. The articles of trade, as they call them, are given in ſmall quantities to the women, to ſecure their attachment; and the men are ſometimes rewarded for a hard day's work with a leaf of tobacco.

Ever ſince Shelikoff formed his eſtabliſhment at Kadiak, no other companies have dared venture to the eaſt of Shumagin's

iſland. I am inclined to think that Suchanin's veſſel will be the laſt that will attempt to viſit theſe iſlands for furs; and probably he will obtain hardly any other than foxes', which are ſtill here in conſiderable numbers, and even reſort to the villages in cold nights in queſt of prey.

Shelikoff has formed a project to obtain the ſole privilege of carrying on this trade without a rival; and he will probably, one day or other, ſucceed; but not before the ſcarcity of furs leſſens the value of this trade, and renders a freſh capital neceſſary for making new excurſions to diſcover other ſources of commerce, or rather of wealth; then the directors of the preſent concern will explore the regions of America; and, if nothing advantageous occurs, they will, doubtleſs, retire from the concern, ſecure in their poſſeſſions, and leave the new members to purſue the undertaking.

During the month of March the ſcurvy ſeemed perfectly at a ſtand, neither increaſing nor diminiſhing materially upon the afflicted; but early in April, when the new plants produced a ſupply of vegetables, thoſe ſick who had uſed crutches were enabled to relinquiſh them, and willingly gave them up to ſuch as began to creep out of their hammocks. The weather, though it continued hazy, was drier than it had been ever ſince our arrival.

We now began making preparations to leave this fatal iſland; when we diſcovered that our ſails, cordage, and rigging of every kind, had ſuffered from the climate as much as our ſhip's company; every thing was quite rotten, and our veſſels very foul. Captain Hall, who had now the command, took charge of the Slava Roſſie, and Captain Saretſheff went to the Black Eagle.

Notwithſtanding every individual exerted himſelf to the utmoſt of his abilities, however, we were not ready to depart before the middle of May.

We had received, as tribute from about five hundred of the natives of the Aleutan iſlands, a dozen ſea otters' ſkins, and of fox ſkins, I believe, near ſix hundred of different ſorts; in return for which, we had diſtributed all our trinkets and tobacco. The extreme poverty of this place prevented our obtaining any articles of value for ourſelves: we procured, indeed, a few curioſities, but nothing elſe.

On the 16th of May our veſſels were hauled into the outer bay. We were now elated at the proſpect of once more reviſiting Kamtſhatka, after the melancholy ſenſations that we had endured for eight months and ſixteen days, paſſed in one continual ſtate of anxiety upon this iſland, the grave of ſeventeen of our ſtouteſt hands; where, during the whole of our ſtay, we had only been cheered eighteen times with the ſight of the ſun, and never experienced one clear day. On the 17th we ſailed out of the Bay of Amoknak, and the ſame day ſaw the very remarkable ſolitary rock, reſembling a pillar, ſituated about 30 miles north of the eaſtern point of Oomnak.

Nothing remarkable happened during our paſſage to Kamtſhatka. We loſt ſight of the Black Eagle the 7th of June; and on the ſame day ſaw an iſland, which we took for Semi Sopoſhni, burning in ſeveral places, particularly toward the ſouthern extremity. On the 16th, after encountering a few contrary gales and baffling calms, we arrived in the bay of Avatſha, in a very thick fog (which fell upon us at the mouth of the bay), and came

to

to anchor near the entrance into the inner harbour of St. Peter and St. Paul, without being able to ſee any land *.

Notwithſtanding we were as ſilent as poſſible on board, with a view of ſurpriſing the inhabitants when the weather became a little clear, we had not lain long before we heard a boat rowing towards the veſſel; and were ſhortly after amazed at ſeeing an Engliſh pinnace coming along-ſide, with Captain Charles William Barkley in it, whoſe veſſel, the Alcyon, from Bengal, was at anchor in the inner harbour on a trading voyage. His cargo conſiſted of articles that were invaluable in this part of the world; particularly in a port ſo eligibly ſituated for encouraging commercial undertakings; namely, iron in bars, anchors, cables, and cordage, with various kinds of ironmongery wares, and a conſiderable ſtock of rum. Notwithſtanding this, the commander of the port having neither authority nor reſolution to ſecure a purchaſe for account of government; and the traders of this peninſula (who ſtile themſelves merchants) being merely a ſet of roving pedlars, without either capital or credit (and, what is ſtill worſe, without principles to ſecure either); Captain Barkley was neceſſitated to take theſe articles back again, although they were offered at leſs than one third of the charges of tranſporting ſuch commodities from the manufactories in Siberia.

A man who has reſolution to ſtrike out a new line of commerce, or rather to ſeek a new ſource of trade, in parts of the world ſo little known as are theſe regions, at the ſame time unacquainted with the language and with the wants of the inhabitants, is rather threatened with loſs, than flattered with proſpects of profit,

* Captain Saretſheff, in the Black Eagle, arrived on the 19th.

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in the firſt attempt; and nothing ſhort of enthuſiaſtic hope of future advantages can compenſate for the degree of anxiety that he muſt ſuffer. Such a man, moſt certainly, merits all the encouragement that the government can give him, which is ſure to be eventually benefited by his ſucceſs. Conſidering theſe circumſtances, and that the two veſſels employed in our expedition were in the greateſt need of entire new rigging, anchors, &c. the preſent favourable opportunity of ſerving Captain Barkley by clearing his ſhip was a ſecondary conſideration, compared to the advantages which government would have derived from ſo valuable an acquiſition of the moſt neceſſary articles that the port could poſſeſs. This I repreſented to the governor of the port, and to the commanding officers of our expedition; but both equally feared to act without poſitive orders. In other reſpects, however, we gave him all the aſſiſtance in our power. Captain Barkley was accompanied by his lady, and a ſon of about ſeven years old. Their behaviour was very polite, and particularly pleaſing to us. I lament that we were not able to make them equal returns, but flatter myſelf that they were ſatisfied with our endeavours. The extreme poverty of the place, and the miſerable ſituation that we were in, muſt have been ſufficient in their eyes to prove an excuſe for us. They left this place the 1ſt July O. S.

Captain William Peters, who arrived here on the 9th Auguſt 1786, was more fortunate in the diſpoſal of his cargo, owing to a mere accident that befel the only man in this part of the world who had a capital and an eſtabliſhed credit in Moſcow, which capacitated him to become a purchaſer: I mean Gregory Shelikoff, who ſailed the 22d May of the ſame year from his eſtabliſhment in Kadiak for the port of Ochotſk, with a cargo of furs. Contrary winds prevented his arrival at the Kuril iſlands till the 30th July, which

which alſo detained him here eight days. Still continuing weſterly, he reſolved to ſteer for the bay of Tſhekafkoi, at the eſtuary of the Bolſhoia Reka, on the weſt ſide of Kamtſhatka, to purchaſe a ſupply of freſh fiſh. When he arrived off this place he caſt anchor, and went on ſhore with the ſhip's boat, which he immediately ſent back again. Having purchaſed fiſh, his intention was, to return to the veſſel; but a ſudden ſquall drove her out to ſea; and, as the crew were all ill of the ſcurvy, Shelikoff concluded that they would make the beſt of their way to Ochotſk. He himſelf went to Bolſhoiretſk, where he arrived on the 15th Auguſt, and bought three horſes to travel by land to Ochotſk. While he was there, intelligence was received of the arrival of an Engliſh ſhip at the harbour of St. Peter and St. Paul, for which place he immediately ſet out. He arrived on the 23d of the ſame month, and was well received by the Engliſh; for his own account is as follows:

" When the Engliſh obſerved my arrival, ſome of them immediately came on ſhore in their boat. The captain and two officers met us in a very friendly manner, and invited us to go on board their veſſel, where they ſhewed me ſamples of their goods, and ſaid that they had letters from the Eaſt India Company to the commander of Kamtſhatka, in which the company expreſſed a deſire of opening a trade with Ruſſia, and requeſted permiſſion. I endeavoured to diſcover whence they came, and the courſe that they had ſteered; for they did not conceal their charts from me. I heard that they were from Bengal, which place they left, according to our ſtile, on the 20th March; ſailed the 16th April from Malacca; arrived the 29th May at Canton; left it the 28th July, and arrived here the 9th Auguſt. They were three officers and a Portugueſe. The crew conſiſt-

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" ed of Engliſhmen, Indians, Arabs, and Chineſe: in all, 70.
" The veſſel was built entirely of mahogany, had two maſts and
" twenty-eight ſails; was ſheathed with copper to the gunnel,
" and mounted twelve guns.

" After ſupper, Captain Peters with his officers conducted me
" on ſhore; but we deferred trading till the arrival of the com-
" mander of Kamtſhatka, Baron Von Steinheil, who came on
" the 25th, and acted as interpreter, ſpeaking the French lan-
" guage. They bound themſelves to pay duty, according to the
" claims of government; I gave them a liſt of articles wanted
" here, for their future government; purchaſed goods to the
" amount of 6611 rubles; paid in part 1000 rubles, and gave
" bills upon Moſco at two months' ſight, bearing intereſt till paid,
" at the rate of ſix *per cent.* On the 3d September I took leave
" of the Engliſhmen, who intended to ſail the next day. On
" the 8th I arrived with my goods at Bolſheiretſk, where I im-
" mediately ſold the whole for upwards of 10,000 rubles in
" ready money."

Captain Peters was afterwards wrecked upon Bering's iſland, and only two of the crew ſaved (a Portugueſe and a Laſcar). Theſe travelled with me in the Autumn of 1788 from Ochotſk to Yakutſk, in their way to St. Peterſburg. The Portugueſe told me, that Captain Peters wanted to load his ſhip with copper, which he had a notion that he might collect at Bering's or Copper iſland. In all probability he was miſled by the exaggerated accounts of the quantities of copper found upon thoſe iſlands.

CHAP. XX.

A Part of the Company ſail, under Captains Hall and Saretſheff, for Ochotſk.—Intelligence received from Captain Billings and his Party.—Letter from Mr. Main to the Author, giving a brief Sketch of their Sufferings.—An alarming Earthquake.—La Flavia, a French Ship, arrives with ſpirituous Liquors and other Articles.

THE impoſſibility of entering the port of Ochotſk with our large veſſel compelled us to take the reſolution of laying her up in Kamtſhatka, and waiting (for our deliverance) the arrival of the tranſport-veſſel with the annual ſupply of proviſion for the peninſula. As, however, our company was too numerous to embark in one of theſe galliots, Captains Hall and Saretſheff determined to ſail with as many as they could take on board the Tſhernoi Orel. They were ready early in the month of July; but eaſterly winds prevented their departure until towards the latter end of the month, when they ſet ſail with an intention of exploring the Kuril iſlands and the coaſt of China to Ochotſk *.

Shortly after their departure, we received intelligence from Captain Billings, of his ſafe arrival at the river Angarka, after encountering the greateſt difficulties, and ſuffering innumerable

* They were prevented executing this undertaking by contrary winds, which detained them at the Kuril iſlands till late in Auguſt, when they thought it more adviſable to ſail direct for Ochotſk.

hardſhips

hardſhips from the Tſhutſki. I received a letter from Mr. Main, of which the following is a copy:

" DEAR SAUER,

" I ſhould think it a ſpecies of ingratitude to let ſlip an opportunity of writing to you, to inform you of our ſafe arrival at the river Angarka * on the 15th inſtant, after undergoing every thing that is bad during the ſpace of ſix months and two days; ſuffering by the moſt violent froſts, without ſhelter from the bleak north winds; owing to this barren country not producing the leaſt bit of wood, except when we fell in with rivers that afforded on their borders ſome creeping willows. We were therefore obliged to put up with the frozen meat of deer, and whales and ſea-horſe fleſh, raw; and even with theſe the Tſhutſki fed us very ſcantily, not only almoſt ſtarving us, but at the ſame time robbing us daily before our faces. They alſo formed two plots, at different places, to murder the Captain and our whole party; but God Almighty prevented their laying violent hands upon us; and we have great reaſon to thank our Maker that we are now quite out of their power, and getting ready to ſet out for the Lower Kovima, for which place we depart to-morrow morning, accompanied by Mr. Bander †, whom we found here waiting the arrival of the Tſhutſki.

* The river Angarka is of no great extent. It commences near the ſource of the river Tſhaoon, or Tſhaun; and, taking a contrary direction, flows into the Suchoi Anmui, the latter diſcharging itſelf into the Kovima, oppoſite the village of Neizſhni.

† Mr. Bander is the Iſpravnik, or Captain of the diſtrict of Zaſhiverſk. His buſineſs on the Angarka was to collect tribute from the Tſhutſki. This gentleman's name has occurred frequently in the former part of this work; but, having always mentioned it from memory, I have been led into a miſtake, in ſpelling it Bonnar, inſtead of Bander.

 " I aſſure

" I aſſure you, that I very often curſed the hour wherein I left the Slava Roſſie, having been obliged ever ſince that time to bear with patience the abuſes of the wildeſt of ſavages, and expecting death daily.

" I have a great deal to communicate, but muſt delay it till a future day, being too much confuſed at preſent with the buſineſs of packing up, and joy at ſeeing our old acquaintance Mr. Bander, who travels at all times with a great ſtock of good things; and, as we have had no ſpirits now for theſe ſix months, a little drop makes us very merry. Let me, therefore, conclude with aſſuring you, that I remain ever,

" DEAR SAUER,

" Your ſincere friend,

" JOHN MAIN.

" The River Angarka,
21ſt February 1792."

Several other letters mentioned that the Tſhutſki had deſtroyed their meaſuring lines, and their writing materials, and abſolutely prohibited the taking of any notes, or making remarks; which, however, without theſe violent reſtrictions, was rendered impoſſible by the ſevere froſt and driven ſnow, which completely prevented their obſerving the lakes from the land; and as they did not approach the ſea-ſhore any where, except the Bays of Melſhikma and Klutſhenie * (the latter was frozen at the time, and from hence their courſe was weſt to the Angarka), they had not obtained any knowledge from their own obſervations of the ſituation of Shalatſkoi Promontory, the Tſhaun Bay, or the direction of the coaſt of the Icy Sea between the eaſtern promontory and

* The mouth of this bay is at Captain Cook's Cape North.

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the fartheſt place obſerved in 1787, in our excurſion to the Icy Sea; namely, 30 miles eaſt of Barannoi Kamen, the cape called by Shalauroff Peſoſhnoi Muys.

The letters mentioned, that Captain Billings's intentions were to go immediately to Yakutſk. He alſo deſired, in his papers to the Command, that I would make all poſſible haſte to join him at the above-mentioned place.

We were in daily expectation of the arrival of the tranſport veſſel; and our Company conſiſted of

Capt. Bering,
Mr. Bakoff,
Bakulin,
Robeck,
And myſelf,
} of the Expedition;

beſides the commander of the harbour, Major Schmaleff, and his Aſſiſtant Enſign Roſtergueff. All the reſt of our neighbours were petty officers, ſailors, and Coſſacs.

As my buſineſs did not confine me to the harbour of St. Peter and St. Paul, I reſided chiefly at Paratounka, and made frequent excurſions on the chaſe with the Kamtſhadals, ſometimes for eight or ten days together, in the woods, and roving about the mountains at no great diſtance ſouth of the Bay of Avatſha. I ſaw bears in great numbers, wolves, foxes, and a few deer; but could only kill the former, as we had no dogs with us to run the other animals down. Hares alſo were in great plenty, but extremely ſhy.

On the 11th Auguſt, in the harbour of St. Peter and St. Paul, I obſerved a number of ſwallows flying about, apparently much

frightened. They were red breaſted, a ſpecies never remembered to have been ſeen here; and the inhabitants immediately predicted ſome remarkable event; they were, however, only ſeen during the morning. The next morning, about five o'clock, we were alarmed by a violent ſhock of an earthquake, preceded by a rumbling noiſe, little ſhort of thunder. The motion of the earth was undulatory for nearly the ſpace of a minute. I was dreſſing myſelf, and was thrown down, which induced me to get out of the houſe as quickly as poſſible. The water in the bay was agitated like a boiling cauldron. The ſhock came from the north-eaſt, and appeared to me to continue upwards of two minutes; but other gentlemen were of opinion that it did not laſt more than one. A ſailor, one of the watchmen on board the ſhip, was thrown out of his hammock. At Paratounca it was more violent; the earth opened in many places, and water and ſand were thrown up to a conſiderable height; all the buildings in the village were more or leſs damaged; one balagan was thrown down; ſome of the ovens (the only brick-work about the buildings) were alſo ſhaken in; and all the paintings, &c. in the church, except Captain Clerke's eſcutcheon, were thrown from their faſtenings.

At Neizſhni Kamtſhatka the inhabitants were extremely terrified; nor could they explain whether the noiſe or the ſhock preceded. The ſituation of the town is on a neck of land formed by the diſcharge of the Raduga, a conſiderable river, into the Kamtſhatka; the bed of the former was dry, and the inhabitants ran acroſs it toward the mountains. They, as well as the cattle, were thrown down; and the continuance of the trembling was, according to their account, near an hour; the earth opened in many places, and ſunk conſiderably in ſome. The volcano Klut-

ſhefskoi

ſhefskoi emitted a vaſt column of black ſmoke; a noiſe like thunder ſeemed to iſſue from the bowels of the earth; the bells of the two churches rang violently; and the howling of the dogs, and ſcreams of the people, ſurpaſſed all deſcription, for the latter expected every moment to ſee the complete deſtruction of the town. But when the ſhock was over, the loſt water of the river reſumed its former channel, and the inhabitants returned to their dwellings. Not a ſingle brick chimney or oven was left ſtanding. The altar of one of the churches * was ſeparated from it about a foot, inclining a contrary way; and the greater part of the balagans were thrown down.

It is remarkable, that the inhabitants of the village at the foot of the burning mountain only heard the noiſe, and did not feel the ſhock; nor did it croſs the mountains to the weſtern ſhores of the peninſula.

Diſpatches from St. Peterſburgh to the commander of the port announced the departure from France of a Ruſſian ſubject of the name of Torckler on board his own veſſel, with a view of ſupplying theſe diſtant parts of the world with proviſion and every other neceſſary, and recommended the governor's aſſiſtance to the ſaid Torckler. Towards the latter end of the month of September the veſſel arrived, a fine new ſhip of about ſix hundred tons, copper-bottomed, and called La Flavia. Her crew conſiſted

* Churches and houſes throughout Ruſſia, in all ſmall towns and villages, are built of timber; the ſpars laid on one another; the ends notched to admit of their lying cloſe together, and the interſtices filled with moſs. The altars are detached ſpars at the eaſtern extremity of the church, built as cloſe to its body as poſſible. The top of the belfry at Neizſhni inclines in one direction more than three feet over the foundation of the building. It is about 40 feet high; and I think that the joiſts at the end of the ſpars are the only means of preventing its fall.

of,

of, I believe, ſixty men, beſide officers. She carried the new French flag, and the officers wore the tri-coloured cockade. Mr. Torckler was the ſupercargo only; the greater part of the cargo conſiſted of ſpirituous liquors; and the captain and officers were in every reſpect gentlemen and men of ſcience. About the time when this ſhip arrived, we were informed that the tranſport veſſel from Ochotſk was driven on ſhore near the river Itſha, between Bolſhoiretſk and Tigil. Captain Bering and Mr. Bakoff, therefore, went to that veſſel to ſee if they could afford her any aſſiſtance; and I received the charge of the ſailors, &c. here.

CHAP.

CHAP. XXI.

The Peninſula of Kamtſhatka deſcribed.

On the return of Captain Bering and Mr. Bakoff toward Chriſtmas, I made an excurſion to Neizſhni Kamtſhatka town, and returned to the harbour in the month of April; which trip, in addition to others which I had before made, has enabled me to give the following account of the peninſula.

I ſhall commence my deſcription at the ſouthern extremity, which the Ruſſians call the Lopatka, latitude 51°, longitude 156° 40′, eaſt from Greenwich; a low point of land, widening and riſing gradually into mountains, barren and rocky, only producing here and there the creeping cedar and willow, to the extent of 40 miles. Birch trees then appear in the inconſiderable vallies, which are replete with lakes and runs of water ruſhing into the ſea both eaſt and weſt. A cluſter of mountains occupy the whole ſpace from the Lopatka to latitude 53° 5′, where, in the neighbourhood of the village Malka, they divide into two branches, one trending north north-weſt; the other, which may be called the principal chain, leads north north-eaſt. The place where the mountains ſeparate is the higheſt land on the peninſula, and forms a barren ſtony deſert of 65 miles in length, in a direction north and ſouth, and from 3 to 15 in width, producing in detached ſpots bruſh-wood, willows, and a very few ſcattered and ſtunted birch-trees. It is replete with ſprings and

brooks; ſome of which uniting, and flowing ſouth and ſouth-weſt, form the Biſtrea; while others, at only a few fathoms diſtance, take an oppoſite courſe, and are the ſources of the river Kamtſhatka. At the end of this deſert, the mountains cloſe within a mile or two, and a foreſt of birch-trees follows to the village Apouſhinſk, where the river Kamtſhatka is navigable for ſmall boats to its diſcharge.

From this place the face of the country aſſumes the appearance of extreme fertility. The valley widens, and the ſpace between the mountains eaſt and weſt is at Virchni Kamtſhatka 40 miles. The ſoil is deep and rich, compoſed of black earth, mixed with fine black aſhes from the burning mountains, and fine iron ſand, which adheres to a magnet, and forges well with bar-iron, but uſed alone is very brittle.

The productions of nature are, a ſmall kind of wild black cherry (tſheromka), in great abundance; the wood of which, being particularly hard, is uſed by the Kamtſhadals for their guiding ſticks to the ſledges: the thickeſt trees that I have ſeen are nine or ten inches in circumference. Firs, common pine and larch trees of extraordinary ſize, with birch, poplar, aſp, and mountain-aſh, clothe the mountains to their ſummit. The underwoods are, currant, dog-roſe, hawthorn, alder, and buſhes producing berries.

The climate is very different from that of the ſouthern and northern parts of the peninſula, the valley being completely ſheltered from the ſea-breezes that chill the air in other parts, and prove a great check to vegetation, which commences here in the month of March. The ſcenery is beautiful beyond deſcription,

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the river meandering through the midſt of the valley, from 50 to 250 yards wide, and from eight to 15 feet deep, and being replete with trout and every ſpecies of ſalmon in the ſeaſon. This valley is 180 miles in length, frequently opening proſpects of the Tolbatſhinſk, a lofty double-headed mountain, conſtantly emitting an immenſe column of black ſmoke; while the ſecond volcano, Klutſhefskoi, towering to an incredible height, illuminates the clouds with its blaze, and affords a view awfully grand.

Twelve verſts below Virchnoi Kamtſhatſkoi Oſtrog, is the village called Milkovoi, inhabited by farmers ſent from Siberia at government expence, and poſſeſſing particular emoluments, for the purpoſe of growing corn and pulſe to ſupply the country. They live uncontrolled, however, and find it eaſier to accumulate wealth, by acting as retailers for the merchants of Kamtſhatka, and going themſelves on the chaſe for ſables, &c. than in purſuing the more toilſome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they alſo grow buck-wheat and rye for their own uſe, which yield abundantly; and I am inclined to think that, had they a proper inſpector to ſuperintend their buſineſs, they might with eaſe grow corn enough of every kind to ſupply not only the peninſula, but all the neighbouring country, Ochotſk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle ſeems equally to anſwer every purpoſe. The Kamtſhadals and Ruſſians make ſewing thread of it, and fabricate from it their fiſhing nets, which ſerve them, if uſed with caution, and properly dried, four or five years. The proceſs of preparing it is nearly the ſame as that for hemp, but I think leſs troubleſome; the nettle grows to the height of ſix and ſeven

feet; the fibres are much finer; and thread of equal thickneſs is ſtronger than that made of the imported hemp.

At Tolbalſhinſk the mountains are broken and barren; they encroach upon the valley, and conſiderably leſſen its width. Storms are frequent between this volcano and that of Klutſhefskoi, but never reach the neighbourhood of Milhovoi, and the trees are conſiderably leſs in ſize; but the country continues fertile as far as 30 verſts north of the village Klutſhefskoi, which is alſo a colony of Siberian peaſants for the ſame purpoſe as thoſe at Milkovoi, and who act in the ſame manner. Their proceedings are in ſome reſpects juſtifiable; for the magiſtracy at Neizſhni exact the ſame payment from them as from the reſidentiary merchants. The court of juſtice conſiſts of a burgo-maſter, four members, or rathmen, a ſecretary, writers, and watchmen; receiving a ſalary for the time they are in ſervice: and frequently an expenſive deputation is ſent to Tigil, Bolſhoiretſk, Virchni, and ſuch places as are reſorted to by theſe pedlars; ſo that it is a matter of doubt with me, whether the culture of the earth would render any harveſt ſufficient to anſwer the payment of their claims. In ſome years they amount to 18 or 20 rubles, and in others half as much more.

As you approach the north, the ſeverity of the climate increaſes; the ſoil becomes ſandy and ſtoney; and the vegetable productions are ſtunted and weak. The iſthmus is ſituated in latitude 59° 20′, and the diſtance from ſea to ſea is here about 40 miles. The wideſt part is from Kronotſkoi Noſs to the river Itſha, about 220 miles.

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I have already mentioned the ſituation of the town Neizſhnoi Kamtſhatka, which contains 80 iſba's, or houſes, with two churches; and its number of inhabitants, including children, 548 ſouls; latitude 56° 33′.

The weſtern coaſt of Kamtſhatka is uniformly low and ſandy, to the diſtance of about 25 to 30 miles inland, where the mountains commence. It produces only willow, alder, and mountain-aſh, with ſome ſcattered patches of ſtunted birch-trees. The runs of water into the ſea from the mountains, do not deſerve the name of rivers (except the Bolſhoia Reka), though they are all well ſtocked with fiſh from the ſea in ſeaſon, as trout and different ſpecies of ſalmon. They are generally at the diſtance of 15 to 20 miles from each other. The Itſha and Tigil are the moſt conſiderable; and neither of theſe have a courſe, with all the windings, of more than 100 miles.

The ſea is ſhallow to a conſiderable diſtance; and the commanders of the tranſport veſſels, who never loſe ſight of the expoſed coaſt if they can help it, judge of their diſtance from land, in foggy weather, by the ſoundings, allowing a fathom for a mile; nor is there at the entrance into any of the rivers more than ſix feet at low water, with a conſiderable ſurf breaking on the ſandy beach.

The villages on this coaſt are, Tigilſk, Itſhinſk, and Bolſhoiretſk (ſituated on the Tigil, Itſha, and Bolſhoia rivers). Of theſe the former is the moſt conſiderable, containing 45 wooden houſes, and one church. The Ruſſian charts place it in latitude 57° 55′. This, which they call a fortified town, is ſurrounded by wooden paliſades, and was built in 1752. The number

ber of inhabitants are 338, including women and children. Itſhinſk alſo contains a church, and about 10 houſes, with 50 inhabitants. Bolſhoiretſk contains 37 houſes, and the total number of inhabitants are 235. Beſide theſe, there are eight inconſiderable villages, containing each three or four houſes, on the weſt coaſt.

The eaſtern coaſt is compoſed of mountains, rocks, rugged cliffs, and bold promontories, replete with inlets, and the appearance of ſuch. Their entrance, however, is blocked up by reefs of rocks, the openings of which are only to be entered by the boats of the natives. Immenſe maſſes of ſtone are ſcattered out at ſea to the diſtance of one, two, and three miles; ſome of them being only diſcernible by the breakers, while others tower to a conſiderable height. The depth of the ſea varies much, and ſuddenly, from 30 to 90 fathoms, and more. Earthquakes are frequent, and ſometimes very violent.

The only harbour for ſhips on the whole peninſula is the Bay of Avatſha *, which is probably the ſafeſt and moſt extenſive in the world. I ſhall exert my utmoſt ability to deſcribe this place; but fear that I ſhall ſcarcely be able to do it juſtice.

I will ſuppoſe myſelf approaching the coaſt from the ſouth-eaſt. When firſt ſeen, it appears ſtrait and uniform, without bays or inlets; the land riſing into moderate mountains, backed by ſuch as are more lofty. Three of them, apparently united,

* "The term Bay, properly ſpeaking, is rather inapplicable to a place ſo completely ſheltered as Avatſha; but when it is conſidered how looſe and vague ſome navigators have been in their denominations of certain ſituations of ſea and land, as harbours, bays, roads, ſounds, &c. we are not ſufficiently warranted to exchange a popular name, for one that may perhaps ſeem more conſiſtent with propriety." *Cook's laſt Voyage.*

are very conſpicuous to the north of the Bay; the fartheſt, or the moſt weſtern, is the higheſt, and is conical; the next is a volcano, diſtinguiſhable by a column of ſmoke iſſuing from its ſummit, which is broken; the third preſents ſeveral flat tops, lowering, and trending eaſt, from which a narrow and lofty broken and irregular point of land extends about 15 leagues, terminating in a promontory called Sheeponſkoi Noſs. South of the bay are two remarkably lofty mountains; that neareſt the entrance (Viluitſheſkoi Sopka) is formed like a ſugar loaf; the other, Apalſkoi, is far inland, not ſo lofty, and is flat on the top. On getting well in with the land, it is high, craggy, and broken, preſenting the appearance of inlets. When about the latitude of 52° 45′, and longitude 159° 15′, the entrance into the Bay of Avatſha diſcovers itſelf, bearing north-weſt by weſt; ſouth of which, at the diſtance of about four miles, is a ſmall round iſland, compoſed of high pointed rocks, called Staritſhkovoi Oſtrov. The north cape is a bluff head, with a light-houſe on the top of it, reſembling a centinel's box. From this cape eaſtward, to the diſtance of three miles, breakers are diſcernible over hidden rocks, which extend to the ſouth about half a mile. Within the channel, are three detached needle rocks near the north ſide: on the oppoſite ſhore a ſingle one remarkably bulky, the top of which is nearly flat. Soundings leſſen from 40 to 12 fathom, over a ſtoney bottom; and 10 fathom in the channel, ſand and mud.

The entrance is in latitude 52° 51′, longitude 158° 48′, whence Sheeponſkoi Noſs bears eaſt north-eaſt, diſtant about 17 leagues. It forms a channel in a direction north north-weſt four miles deep; the breadth is three miles in the wideſt, and two in the narroweſt part; both ſhores rocky; the ſummits covered with birch trees, mountain-aſh, and hawthorn. Having paſſed this channel,

channel, you enter a moſt magnificent baſin about 25 miles in circumference, completely land-locked, and every where (except the north-weſt extremity) high, and covered with trees. As we advance in the baſin, commodious harbours open: to the eaſt, Rakivinoi, about three miles deep, and three quarters of a mile wide. The ſouth cape is a lofty perpendicular maſs of ſtone. Shoal water over rocks extend from the ſhore into the bay, about 50 fathoms from ſouth to north, which makes the entrance difficult. The north cape is a high rocky ſhore, with ſome rocks that are detached; but theſe are viſible, and not of any extent; the depth within is from 13 to 3 fathoms.

The little harbour of St. Peter and St. Paul is to the north: its ſouth bluff cape is extremely conſpicuous; and the buildings upon the ſpit of land before it are clearly diſcernible. This harbour is in every reſpect convenient for giving ſhips all kinds of repair, as alſo for obtaining fire-wood and freſh water. If all its good qualities are conſidered, I think it may be pronounced the moſt convenient in the world. Six or eight ſhips of war might be conveniently moored in it head and ſtern: the only inconvenience (if it may be ſo called) lies in the amazing toughneſs of the ground; for if the anchor be heavy, and out any time, it will probably be found neceſſary to heave a ſtrain on the ſhip to weigh it. The ſouth of the harbour is bounded by a narrow neck of low land running out from the eaſtern ſhore in a weſtern direction, covered with wooden houſes and balagans; at the extremity of which is the entrance, 38 fathoms wide, and ſix and a half deep: ſhips may paſs ſo cloſe to this point of land, that a man may leap on ſhore. The weſt ſide is a projecting narrow mountain of moderate height trending to the ſouth, terminating in a bluff head, upon which is a battery of three guns, and a flag.

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From this extremity a ſhoal extends ſouth about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houſes of the commander and chief inhabitants. To the eaſt, it is bounded by lofty mountains covered with wood to the very ſummit; namely, birch, mountain-aſh, hawthorn, dwarf-cedar, roſe-buſhes, &c. On this ſide are ſeveral ſprings of very pellucid water ruſhing down the mountains into the harbour, and theſe are very convenient watering places.

The bay is bounded to the north-weſt by the extenſive plains of Avatſha, where two rivers diſcharge themſelves into it; namely, the Avatſha and Paratounca. At the eſtuary of the former, the Kamtſhadals, who formerly reſided in the harbour, have their preſent habitations; while the troops of the garriſon poſſeſs their late dwellings.

The harbour of Tareinſk opens to the weſt: the entrance is about one mile in length, when it ſuddenly turns to the ſouth-eaſt, extending twelve miles in length, and three in width: the depth is from ſix to eight fathoms, mud and ſand. A narrow neck of high land at the bottom, like an artificial partition, ſeparates it from the ſea. This harbour, although extremely convenient in its conſtruction, is not ſo in its ſituation; as an eaſterly wind is abſolutely neceſſary to bring outward bound veſſels into the bay of Avatſha where it is quite contrary; beſides, it is expoſed to the north and north-weſt winds, which blow over the plains of Avatſha right into it, and keep it blocked up by ice till late in the ſeaſon.

Near the mouth of this harbour, on its north-weſt borders, is a valley forming a plain of about one mile and a half ſquare, well wooded with good ſized birch trees: a ſituation which Major Behm thought the moſt eligible of any hereabouts for a town. North and ſouth are lofty mountains of eaſy aſcent, covered with trees to their ſummit. The valley is bounded to the weſt by a freſh water lake of about 15 miles in circumference, well ſtocked with fiſh all the year through; while its borders abound in different kinds of berries, ſarana, tſheromtſha (a kind of wild garlick), and a variety of pot herbs. This lake is the chief ſource of the river generally known by the name of the Paratounca, of which I ſhall ſhortly give an account, as alſo of the other rivers. The remains of numerous villages in the vicinity of this lake ſtrongly indicate the former populouſneſs of theſe parts; but they are at preſent overrun with bears, wolves, and hares.

The fiſh of the bay of Avatſha are, cod all the year through; thornbacks, flounders, and halibuts, as ſoon as the ice begins to break; whitings are caught all the winter by the boys and girls, who make a hole in the ice, lie flat upon it, and look into the water, holding in it a horſe-hair nooſe on the end of a ſtick, which they get round the fiſh, and by theſe means haul them up very faſt. Herrings and ſmelts are the firſt paſſage fiſh that appear (the former in immenſe ſhoals towards the latter end of April), and they remain till the beginning of June: their numbers, indeed, are incredible. In Cook's laſt voyage Captain King ſays, "The people of the Diſcovery ſurrounded ſuch an amazing "quantity (of herrings) in their ſeine at one time, that they were "obliged to throw out a very conſiderable number, leſt the net "ſhould be broken; and the cargo they landed was ſtill ſo abun-

"dant,

" dant, that, beſides having a ſufficient ſtock for immediate uſe, " they filled as many caſks as they could conveniently ſpare for " ſalting; and, after ſending on board the Reſolution a tolerable " quantity for the ſame purpoſe, they left behind ſeveral buſhels " upon the beach."

On the 7th June, in the inner harbour of St. Peter and St. Paul, I obſerved, at the flood tide, a conſiderable number of herrings ſwimming round in circles of about a fathom in diameter. Seeing them continue in this particular manner, I approached very near them, and remarked, in each of the circles, one fiſh very cloſe to the ground, upon the weeds, and apparently without motion. I could not account for this peculiarity in their ſwimming, but thought that the weeds about the herring in the middle became of a very lively yellow colour. When the tide ebbed, and left theſe places dry, all the weeds, ſtones, ſticks, &c. were covered with ſpawn about half an inch thick, which the dogs, gulls, crows, and magpies, were devouring with great avidity. Theſe ſhoals of herrings, which are purſued by ſeals, cod, &c. come in ſpring and in the autumn; there is, however, a conſiderable difference in their ſize; and I believe the ſpring glut are the largeſt fiſh. The natives and other inhabitants enſnare a great quantity in autumn for their dogs.

The oil extracted from herrings is very pellucid and ſweet; it preſerves birds' eggs all the year quite freſh and good, as does alſo the oil of ſeals, whales, &c.

Herrings no ſooner diſappear, than immenſe ſhoals of ſalmon puſh into the bay and up the rivers; the firſt is the ſmaller ſort, called the gorbuſhka (or hunch-back), from a remarkable protu-

berance which diſtinguiſhes this ſpecies. They are in great perfection about four or five weeks; and are no ſooner in a ſtate of decay, than another and larger ſpecies follows. Theſe are ſucceeded by other ſorts, all of the ſalmon kind, until the end of September. I could not diſtinguiſh ſome ſorts till they were boiled, when the paleneſs or redneſs of the fleſh indicated a difference. The names of the different ſpecies are, ſiomga, tſhavitſha (both very large), gorbuſhka, kaiko, krafnaia (red), and belaia (white). They puſh up the rivers, and get into the lakes, where the two latter continue all the winter, but get extremely deformed, crooked-backed, thin, and covered with red blotches; the upper jaw extends beyond the under jaw, and bends over it; the mouth is full of very large teeth, and the fleſh is flabby. Here are alſo great varieties of crabs, ſea eggs, prawns, muſcles, cockles, and the ſmall pearl oyſter.

The plains of Avatſha, which bound the bay to the north-weſt, extend 18 miles from eaſt to weſt, and 35 miles from north to ſouth, producing at their northern extremity only a few patches of birch, poplar, and alders; all the reſt are marſhy grounds, overgrown with ruſhes and coarſe high graſs, with ſome ſpots of oziers and alders; the reſort of myriads of water fowl, ſwans, geeſe, an amazing variety of the duck kind, and I believe every ſpecies of ſnipe. The river Avatſha runs in ſeveral branches through this plain. Towards its northern extremity are an immenſe number of cold ſprings, that form ſeveral baſins of water, with ſmall runs, uniting in a rivulet, which has a courſe towards the ſouth of two miles, and empties itſelf into the river generally known by the name of the Paratounca, but which is called by the natives Ilmitſh; and the original Paratounca is the run from the ſprings above mentioned, oppoſite to the diſcharge of which the village of that name is ſituated. Theſe ſprings do not freeze

freeze in winter, during which ſeaſon they are frequented by ſwans, geeſe, and ſeveral ſpecies of duck, particularly the ſafka, or duck with a melodious note, which has induced me to ſtile it muſical. Here they find an abundance of food, and the pulpy root of an aquatic plant which, in its appearance, exactly reſembles the olive, but is like the cheſnut in flavour: I uſed it as a vegetable, and thought it better than any production of the gardens: the natives call it the ſarana of the geeſe.

With regard to rivers, the Kamtſhatka is the only one of any conſequence. Its ſource I have already deſcribed: it flows nearly north to Neizſhni Kamtſhatka, where it turns to the eaſt ſouth-eaſt about 25 miles, and empties itſelf into a large but ſhallow bay formed by the Kronotſkoi and Kamtſhatſkoi promontories; its diſcharge is extremely ſhallow, not exceeding eight feet at high water, and the breakers are very violent with an eaſterly breeze. This, however, is the only navigable river on the peninſula.

The Bolſhoia Reka has only a courſe of 20 miles. It is formed by the union of the Byſtrea with the Natſheke, a little below Bolſhoiretſk: the former has its riſe from the ſprings near the ſource of the Kamtſhatka, and takes a ſweep from ſouth to weſt; the latter commences a little ſouth of the village Natſheke, and flows nearly weſt about 100 verſts: neither are navigable, though, during the ſpring flood, the natives ſometimes venture down them in their canoes, but with great difficulty, owing to rapids, &c.

The Avatſha has alſo an interrupted and unnavigable courſe of 70 verſts in a direction eaſt ſouth-eaſt. The inhabitants of the village

village Koriatſk, 20 miles up this river from its diſcharge, paſs up and down it in their canoes, hauling them over the flats.

The Ilmitſh, commonly called the Paratounca, has its riſe from near the Viluitſhiſkoi Sopka (called in Cook's laſt voyage the Paratounca); and from a lake already deſcribed near the Tareinſkoi harbour, it makes a circuit of 85 verſts, and diſcharges itſelf into the bay of Avatſha, only three miles in a direct line from its ſource: it is navigable for boats all the way; but I was fourteen hours in traverſing the whole of this river, from the lake, in a canoe. The villagers of Paratounca go on the chaſe of deer, argali, bears, &c. about the ſource of this river, by paſſing down the ſtream into Tareinſki harbour, and hauling their canoes over the plain already mentioned into the lake. An immenſe number of rivulets from the mountains flow to the eaſt into the ocean, but none of them are either remarkable, or have their banks inhabited.

Here are no lakes of any extent: the names of the principal ones are, Oſernoi, about 40 miles from Cape Lopatka; Kronotſkoi, 20 miles ſouth-eaſt of Tolbatſhinſki volcano; and another of leſs extent, ſituated about 40 miles north of Neizſhni Kamtſhatka, called Nerpitſhi: the natives ſay that they are replete with fiſh; and *tradition* relates, that the fiſh of theſe lakes had two heads, or that they poſſeſſed legs; and, being ſacred to ſome deity or demon, thoſe who preſumed to enſnare them were puniſhed with misfortunes: ſome of the natives, however, ſeem to doubt the *truth* of this, while others ſtill firmly believe it.

Hot

Drawn by W. Alexander

Engravd by W. Cook

A View of the Ozernoi Hot Springs of Kamtchatka.

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Hot ſprings are very numerous, and ſeem ſcattered all over Kamtſhatka; but thoſe in the following places are the moſt remarkable:

Opalſki, or Oſernoi, ſituated nearly midway between the Lopatka and Bolſhoiretſk, about 15 miles ſouth of the Kamtſhadal village of Yavinſk, ſurrounded by mountains, and at no great diſtance from the volcano of Opalſk. They occupy a valley of conſiderable extent, and are ſcattered to the diſtance of ſix miles, ſome parts of which produce detached birch trees, the ſweet plant, &c.; but in general the ſoil is barren, compoſed of different coloured marl, and large ſtones which appear to have been ſcattered by eruptions of ſome volcano. The largeſt hot ſpring is at the foot of one of the mountains; and we heard the noiſe that it made at the diſtance of near a mile before we came to it. It is about ſix fathom in circumference, boiling up to a conſiderable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a ſhort time: all around, it bubbles up between large ſtones; it then divides into two ſtreams, which deſcend over ſtones, and unite at the bottom with a ſmall rivulet formed by the other ſprings to the north: they flow a little way to the ſouth, then turn weſtward into the lake Oſernoi. About the border of theſe ſprings, and the rivulet which they form, we obſerved petrified, or rather calcariſed, foliage of the ſweet plant, birch leaves, ſticks, &c. of a beautiful whiteneſs; but ſo extremely delicate in their texture, that we could not preſerve any, even in cotton; for they mouldered to duſt. The Kamtſhadals ſuppoſe this to be the habitation of ſome demon, and make a trifling offering to appeaſe his wrath; without which, they ſay, he ſends very dangerous ſtorms. Our naturaliſt and Mr. Varonin, who aſcended to theſe ſprings in 1790, experienced

a whirlwind, which tore their tent, and ſcattered its contents about, many of which were never found again. Aſhes were ſcattered upon the ſnow about four inches deep, reſembling coarſe gunpowder, probably from the volcano Alaid (a ſolitary mountain in the ſea, ſituated about 20 miles ſouth-weſt of the Lopatka), which burns violently at this time (February 1793). It has at various intervals emitted ſmoke ever ſince 1790. The oldeſt inhabitant does not remember its having done ſo before, although tradition informs them of its violent eruptions.

Toward the ſource of the Byſtria, near the village Malka, are hot ſprings, a little way up the aſcent of one of the mountains, which boil out of the earth in two or three places about a foot wide. Similar ſprings are ſeen near the village Natſheke, but more extenſive, and forming in their run ſeveral convenient bathing-places. Theſe have a ſulphureous ſmell; and the ſtones taken from the bottom of the openings, where the ſprings appear, are covered with a ſhining thin coat, which reſembles ſilver at firſt, but gets dull and of a dark colour after it has been ſometime expoſed to the air: the ſurrounding earth, to the diſtance of 20 fathoms in every direction, is warm, replete with empty ſhells like thoſe of ſnails, and a tranſparent glutinous ſubſtance; as alſo with ſpots of loam, whereon any thing heavy being thrown ſinks immediately. South of theſe ſprings, about the diſtance of 30 verſts, at the ſource of the river Natſheke, is a ſandy level ſpot, with ſeveral hot ſprings, the water of which is ſaid to be brackiſh.

At the diſtance of 12 verſts from the village of Paratounca, in a direction north-weſt, is the diſcharge of a deep rivulet of warm water, called Klutſhevoia, navigable for canoes three verſts upwards.

wards. It ſprings from ſeveral hot water lakes in an extenſive plain; one of which lakes is about 100 fathoms long, and 7 fathoms wide; very convenient for bathing near the ſhore, but the middle very deep, and extremely hot. About 20 fathoms from this is another, about 5 fathoms by 7, but exceſſively hot: a body of boiling water iſſues through a ſquare hole in a ſtone at the eaſtern extremity; and it has a run into a cold water ſpring, ſo narrow, that you may ſtand with one foot in each. Ulcers, old and freſh wounds, are reputed to heal from bathing in this water. I uſed it for tea, but the flavour was not very agreeable, being ſomething like that of alum. The hot ſprings of Shumatſhik are ſituated 90 verſts north of the bay of Avatſha, and flow into Kronotſkoi Bay. There are ſeveral others, but of no note.

The following are the principal volcanoes:

Opalſk: I have deſcribed this mountain as ſeen from the ſea. Its ſituation is near the hot ſprings; but its emiſſion of columns of ſmoke is of very recent date, and they are not conſtant; nor has it ever been obſerved to blaze.—Viluitſh, or Viluitſhiſkoi Sopka: this ſeems now completely extinguiſhed:—Avatſha, 25 miles north of the bay, conſtantly ſends forth a body of ſmoke from its ſummit; as does alſo Tylbatſh, and Klutſhefſkoi, or Kamtſhatſkoi Sopka, both ſituated near the river. Tylbatſh (frequently written Tolbalſhinſk) is one of the mountains that conſtitute the eaſtern chain; but projects conſiderably towards the river. It is more lofty than the reſt, and has a pointed top. A little way down it, a ſharp ridge ſtretches away to the north; from this ridge, and the ſide of the mountain where it joins, the ſmoke iſſues. I have obſerved, in a clear night, a reflection over it, reſembling the Aurora Borealis. Klutſhefſkoi volcano may be reckoned among

the higheſt peaks, I believe, in the world. It is ſituated 175 miles weſt of Bering's iſland, from which, however, it is diſtinctly ſeen in clear weather at the time of the ſun's ſetting: at leaſt, I am aſſured of this by ſeveral Kamtſhadals who have been on the iſland. This volcano is frequently ſubject to eruptions: in 1789, on the 20th November, a great noiſe preceded an earthquake; flames burſt forth, with diſcharges of ſmall ſtones and aſhes: the trembling of the earth and the noiſe continued, more or leſs, till the 23d, when it abated conſiderably; but on the 15th February 1790, it again reſumed its former violence until the 21ſt: all this time earthquakes were felt two or three times in the courſe of every 24 hours.—Shevelutſh is 80 verſts north of Klutſhefſkoi: this burnt formerly; but now it ſeldom happens that ſmoke iſſues from it: this volcano is the ſource of two rivulets, the Iltſhutſh and Bakus, both of which flow into the Kamtſhatka.

The number of inhabitants may be ſtated as follows, men, women, and children:

At the town (Neizſhnoi) - -	548
Oſtrog Tigil - -	338
Virchnoi - -	226
Bolſhoiretſk - -	235
And at the harbour of St. Peter and St. Paul -	85
Coloniſts - - -	255
Ruſſians - - -	1687
Kamtſhadals - -	1053
Total - -	2740

Of the natives 351 males only pay tribute, or, rather, are living on the liſt of thoſe who are tributary, according to the reviſion made

made during the government of Mr. Reinikin, who ſucceeded Major Behm. The reviſor (in 1784), by ſome unaccountable miſtake, has frequently noted the name of one and the ſame perſon as the inhabitant of two or three villages; and from each village the tribute is exacted for this man. They have made repeated remonſtrances, but in vain: this impoſition, however, is the leaſt of their ſufferings. They are compelled to paſs the greater part of their time in procuring neceſſaries for their viſitors. The governor makes his annual circuit round the peninſula, and receives a preſent from every individual; the captain of the diſtrict goes his rounds twice; different deputations from the courts of juſtice, ſoldiers on furlough, couriers, &c. all travel at the expence of the poor native, who is compelled to keep an extraordinary number of dogs for their conveyance. Government horſes are quartered at each village, and the inhabitants muſt provide a ſtock of hay for them. Thus the Kamtſhadal ſcarcely finds time to collect a ſupply of food in the fiſhing ſeaſon for his own family.

In 1768 the ſmall-pox carried off 5368 of the inhabitants; and ſince the departure of Major Behm, the court of the interior (Zemſkoi Sud) has diſcovered, that the Kamtſhadals are indebted to government the whole tribute for the unfortunate ſufferers by that diſorder, and lay claims at preſent for the debt. The natives produce receipts; but are told, that an ukaſe from Irkutſk claims the payment. They appointed a delegate to lay their grievances at the feet of their ſovereign; he, however, only reached Irkutſk, when he was promiſed redreſs, and ſent back again: he returned laſt year, and is the chief of Shapinſki village, a very intelligent man, and, I thought, very likely to help me to

ſome information as to their former cuſtoms and religion, which are now quite aboliſhed; nor is their language pure.

He told me, that the Kamtſhadals called themſelves Itolmatſh (he ſays they are the Aborigines of the place), and the deſcendants of Newſteach or Newchtſhatſh, and that their God was Newſteachtſhitſh. Koutka is his intelligent ſpirit, the meſſenger of vengeance to their tormenting demons, and of rewards to the ſpirits of benevolence: he travels about in an inviſible carriage drawn by flying animals reſembling mice, but ſmaller than the human mind can conceive, and ſwift as a flaſh of lightning. "Our Sorcerers (ſaid he) were obſervers of omens, and warned us of approaching dangers, to avert which ſacrifices were made to the demons: we were then wealthy, contented, and free." He continued his diſcourſe thus as nearly as I could tranſlate: "I think our former religion was a ſort of dream, of which we "now ſee the reality. The Empreſs is God on earth, and her "officers are our tormentors: we ſacrifice all that we have to "appeaſe their wrath, or wants, but in vain. They have ſpread "diſorders among us, which have deſtroyed our fathers and mo-"thers; and robbed us of our wealth and our happineſs. They "have left us no hopes of redreſs; for all the wealth that we "could collect for years would not be ſufficient to ſecure one "advocate in our intereſt, who dares repreſent our diſtreſs to our "ſovereign."

They are an honeſt and hoſpitable race of men, extremely fond of muſic and of brandy. One of them, who conſtantly accompanied me in my aquatic excurſions, and expended every farthing of his money in brandy, I one day ſaw coming to my habitation; and, to tempt him, I hid myſelf in an adjoining room,

room, leaving a glaſs of brandy upon the table, and a bottle half full cloſe to it, with ſome ſea-biſcuit. He came in, ſaw nobody, and called me, but obtained no anſwer. Upon which he advanced to the table, and ſmelt to the glaſs: "It is brandy," ſaid he, "but I will not drink; and the bottle half full; well, I won't "taſte you; but I'll go and ſeek maſter, and ſcold him for "leaving you in this manner. I'll juſt ſmell again, and go."—I ſtepped out of window into the garden, and went to meet him; when he accoſted me in the following manner: "I have been "into your room and ſaw a glaſs full of brandy; perhaps you "won't believe me, but indeed I did not taſte it."—"I dare ſay "you did."—"No, by G—, I did not: I knew you would "not believe me; but a Kamtſhadal will never take any thing "without permiſſion."—"Well, I muſt believe you; will you "come and drink it?"—"Yes, that I will; but I wanted to ſcold "you for leaving it ſo."

They have long ſince adopted the manners of the Ruſſians, and profeſs the Greek religion. Of their former cuſtoms there only exiſt their laſcivious dances, and their impure language, with part of the dreſs. They entertain the greateſt veneration for the memory of Major Behm, under whoſe command they enjoyed the protection of a father. At that time Kamtſhatka was governed merely by the major and his aſſiſtant, Captain Shmaleff, without any other court of juſtice. The revenue of this peninſula was then 40,000 rubles annually, ariſing from the tribute of the natives, the profits on brandy, and the duty on furs; which ſum was remitted to the chancery of Ochotſk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the prieſt of the peninſula, to the Kuril iſlands; from whence they obtained ſea-otter ſkins of a ſuperior quality,

quality, ſeveral Japaneſe articles, and wrought ſilks. The merchants who viſited the peninſula brought other neceſſaries, and hard money for the articles of the natives. Brandy not being conſidered as an article of trade, but a government concern, the ſale was prohibited; and, the commander or his aſſiſtant inſpecting the tranſactions of the merchants, prevented fraudulent proceedings on both ſides. About the latter end of the year 1779, or the beginning of 1780, Major Behm returned to St. Peterſburg. Major Reinikin ſucceeded him in the command, and wiſhed to introduce among the natives the culture of the earth, but could not ſucceed; he brought potatoe ſeeds with him; firſt grew them in his own garden; and from thence they were abundantly diſtributed all over the peninſula, with every ſpecies of garden vegetables, which are cultivated with great ſucceſs by the Ruſſian inhabitants.

In the year 1783 a mandate from her Imperial Majeſty *proclaimed* Neizſhni Kamtſhatka a city; ordained it the ſeat of government of the country under the chancery of Ochotſk; offered privileges to ſuch merchants as choſe to become burghers; and inſtituted courts of juſtice, eſtabliſhments better calculated to govern 300,000 men than 1500, which is about the number of male inhabitants. The governor was denominated Gorodnitſhik (mayor); and his eſtabliſhment conſiſts of a ſecretary and writers; a Kaznatſheſtva (exchequer) for the receipt of the revenue, and payment of officers; a Zemſkoi Sud (court of the interior), of which the Iſpravnik, or captain of the diſtrict, is preſident, and in this court one of the natives is a member to repreſent the whole body; with a magiſtracy to regulate mercantile concerns, as already mentioned.

The

The ſalaries allowed by government to the different officers are as follow:

The Gorodnitſhik - - -	600 rubles.
His Secretary - - -	300
The Kaznatſhae - -	400
Iſpravnik - - -	400

other officers leſs in proportion; ſome of the writers having only 24 rubles per annum.

Price of Articles 1793.	Kazan.	Kamtſhatka.
Linen for ſhirts per arſheen *	18 cop. *	120 cop.
Boots per pair -	3 rub.	12 to 18 rub.
Thread ſtockings do.	125 cop.	4 to 5 rub.
Soap per lb. -	6 cop.	60 to 100 cop.
Candles do. - -	8 cop.	80 to 100 cop.
Tea do. - -	2 rub.	12 rub.
Sugar - -	50 cop.	3 rub.
Leaf tobacco per lib. -	5 cop.	3 rub.
Rye flour, per pood * -	50	500 cop.
Wheat do. - -	60	800 cop.
Rice per lib. -	10	100 cop.

From this ſtatement of prices, the impoſſibility of an officer living upon his ſalary will plainly appear; he is therefore compelled to find out ſome method of increaſing his income, at the expence of the poor natives.

One of the captains of the diſtrict, who came here with his wife and family, finding himſelf extremely diſtreſſed, appropriated

* A pood is 40 lb. Ruſs, or 36 lb. Engliſh. 100 copeaks make a ruble; a copeak may be reckoned little more than a farthing ſterling. 9 arſheens make 7 yards.

the

the tribute of one year to his own uſe, and wrote a letter to the Empreſs; ſtating, that the ſeverity of the climate, the prices of every article of life, and the wants of his family, had compelled him to make uſe of the tribute, conſiſting of ſuch a number of ſables and fox ſkins for their backs and bellies, which he rather choſe to do than rob the poor natives (the only alternative). He requeſted her pardon, and an appointment where he could live upon his ſalary; and the induſtry of his family (of no benefit in Kamtſhatka) might help to repay the amount of the articles that he had appropriated to his own uſe. The Empreſs ordered the governor to give him ſuch an appointment, and pardoned him on account of the good reaſons that he aſſigned; but this pardon was not to be regarded as a precedent; for ſuch mercy was not to be extended to any future perſon who ſhould dare to act in the ſame manner.

The magiſtracy receives its income from the burghers and meſhanin. The latter are privileged pedlers (and the coloniſts are of the number); the former are divided into three claſſes, according to the extent of the capital that they give in, upon which they pay one per cent.

French brandy is now regarded as an article of trade; and a ſpurious ſort is carried about the villages of the natives, who are very fond of it, and pay for it at the rate of one ruble per glaſs.

The Kamtſhadals and reſidentiary Ruſſians employ themſelves during the ſummer in catching fiſh; drying ſome, and ſalting others for a winter ſupply for themſelves and their dogs: in the autumn, in making hay for their cattle, collecting berries, the

ſweet plant, and kiprey; the former is purchaſed by government for the diſtillery of brandy, at three and four roubles the pood when prepared and dried. In the ſpring they collect birds' eggs about the marſhes, and particularly among the rocks at the mouth of the bay of Avatſha: theſe they preſerve all the year with oil, as already mentioned.

CHAP. XXII.

The La Flavia departs for Canton.—A Galliot arrives, and conveys the Party to Ochotſk, after ſome danger from a Leak.—The Author, with the firſt Party, ſets forward for Yakutſk; at which, however, he arrives alone, after encountering much Diſtreſs, and leaving his Companions and his Baggage behind on the Road.—Actively aſſiſted by the Commandant and Captain of the Diſtrict.—The Amoor River deſcribed.—Arrive at Irkutſk.—Sketch of Captain Billings's Expedition acroſs the Land of the Tſhutſki.—Arrival at St. Peterſburg.

On the 1ſt of June 1793 the La Flavia left the harbour for Canton. The officers of this ſhip and our gentlemen had paſſed a very agreeable winter together. Their manners and behaviour were gentlemanlike throughout; nor did any of the inhabitants complain of their want of liberality.

We were now anxious for our departure alſo, but received no intelligence of the arrival of any veſſel till the latter end of July, when the Conſtantine and Helena galliot, under the command of Sturman Petuſhkoff, came into the bay from Neizſhni Kamtſhatka, whither ſhe had carried a cargo of proviſion: ſhe was now bound to Ochotſk, and put in here on purpoſe to take us on board.

We immediately embarked, took leave of our Kamtſhatka friends, ſailed the 2d of Auguſt, and arrived the 19th of the ſame

ſame month at Ochotſk. In this paſſage, however, we had nearly foundered. The galliot, which was ballaſted with ſand, ſprung a leak; the pumps were clogged; and the only method was, to bale out the water, and the ballaſt with it. However, I at length diſcovered the leak; and Mr. Bakoff, who had been of infinite ſervice to our Expedition in many caſes, found means to ſtop it; but not till the water-caſks, &c. were afloat in the hold.

Application was made to the commandant for horſes; and I went off, with the charge of the firſt party, on the 1ſt day of September, having delivered the tribute collected at Oonalaſhka to the chancery of the port, and obtained receipts for the ſame.

I had twelve half-ſtarved horſes, and Enſign Alexeeff and two ſailors were with me. We had extremely bad weather, of wind, ſnow, and rain, which retarded our progreſs very much; nor could we poſſibly make more than 20 verſts a day. Several of my horſes died on the road; but I received aſſiſtance from ſome of the Yakuti, with whom I accidentally fell in as they were returning home from Ochotſk with unladen horſes. I arrived at Alachune with only three of the horſes that I received at Ochotſk. Here I obtained a freſh ſupply of ſuch as were fatigued, and hardly able to get on; and, after ſuffering inexpreſſible difficulties, leaving my baggage behind in the woods, as alſo my companions, in hopes of relief from my endeavours, arrived alone at Yakutſk the 2d of October. I immediately repreſented the deplorable ſituation in which the parties who were to follow me would, of courſe, be placed; and that they would, probably, be loſt, if a ſupply of horſes were not diſpatched directly for their relief, with proviſion and other neceſſaries.

The commandant, Colonel Kozloff Ugreinin, and the captain of the diſtrict, Mr. Hornoffky, exerted themſelves to the utmoſt; and the ſame day about 100 horſes were ſent to their aſſiſtance, and to collect my ſcattered baggage, conſiſting of all my clothes (except thoſe which I had on my back), the remains of our gold and ſilver medals, and other valuable articles. I was ſupplied with neceſſaries by the commandant (whoſe clothes fitted me very well) until the arrival of my own about the middle of November, toward the latter end of which month all the gentlemen, with the ſailors, arrived from Ochotſk. Captain Billings was the only officer of our Expedition remaining here, all the reſt having embarked in the proviſion veſſel returning to Vircholenſk. During my ſhort ſtay here, I had an opportunity of ſeeing the Tungooſe head prince, reſiding on the Aldan, near the diſcharge of the river Mayo *; from whoſe intelligence, in addition to the information received from Mr. Hauſen and other officers of the College of Mines, I am enabled to give the following account of the Amoor, or Saghaalien.

This river takes its riſe from the Kentaiham mountains, about the latitude of 49°, and longitude 110°, eaſt from Greenwich; and is here called the Onon. Its direction is nearly north-eaſt; and at the diſcharge of the Nirza, where the city of Nortſhinſk is ſituated, about the latitude 52°, it bears the name of the Shilka. This courſe it continues to the latitude $52\frac{1}{2}^{\circ}$, its moſt northern extremity, where the Tungooſe call it Amoor, and the Chineſe Saghaalien Ula (Black Mountain River; I preſume, from the oak foreſts on the mountains hereabout, which the Chineſe call

* Alluded to in page 138. He forwarded ſafely a letter directed to Mr. Saretſheff, ſomewhere on the coaſt of Ochotſk, perhaps between the Port and the Aldama or Ud rivers.

Black-

Blackwood). From hence it is navigable in veſſels of moderate ſize, having received conſiderable ſupplies from the torrents ruſhing down the eaſtern and northern mountains, as alſo from a very conſiderable river flowing from the ſouth-weſt, and called the Argoon, which diſcharges itſelf into the Amoor about 180 miles eaſt of Nertſhinſk. In the vicinity of theſe parts the Ruſſians have ſeveral forts. From latitude $52\frac{1}{2}^{\circ}$ to $47\frac{1}{2}^{\circ}$ it flows nearly ſouth-eaſt, receiving in its courſe a number of rivers both eaſt and weſt. The Tſhukir has its ſource from this ſide of the ſame mountains as give riſe to the Olekma and Aldan * (both emptying themſelves into the Lena); and, flowing nearly ſouth, joins with the Silempid, which flows from the vicinity of the Ud †, keeping nearly a weſtern courſe into the Amoor. All theſe rivers are navigable for boats nearly to their ſource.

The country is very mountainous, but the vallies and plains are ſpacious and fertile. I am induced to be ſo particular with regard to theſe rivers, becauſe they form a ſecure retreat to ſuch Yakuti and Tungooſe as are diſſatisfied with their ſituations about Olekma, Yakutſk, the Vilui, and Ud. Here they enjoy the protection of the Chineſe, and, I am told, have built ſeveral ſtrong places: and, as they are very numerous, they form no inconſiderable advance guard to the Chineſe frontiers.

In the year 1787, there migrated to China, from the diſtricts of Olekma, Yakutſk, and the Vilui, more than 6000 Yakuti, with all their poſſeſſions ‡. Theſe circumſtances have led me into a

* See page 24. † The Ud flows into the ſea of Ochotſk.

‡ This intelligence I obtained, in the houſe of the Iſpravnik Mr. Hornoffky, from Meſſrs. Evers and Kyſhkin, both aſſeſſors in the Ruſſian ſervice.

Theſe migrations certainly reduce the number of Tartars tributary to Ruſſia.

digreſſion

digreſſion from the Amoor; and before I return to that ſubject I ſhall preſume to hazard a conjecture, that ſome future traveller may diſcover in theſe parts a nation of people unknown before, who from their mixture of Yakuti, Tungooſe, Burati *, Manzſhuri, and Chineſe, may form a new language of their own. The immenſe tracts of fertile land uninhabited and uncultivated will lead the emigrants to ſelect ſuch places as are moſt likely to produce every means of ſupport; and they may be of great aſſiſtance to the Chineſe by cultivating of corn, &c. The low country, however, labours under the diſadvantage of being ſubject to inundations, and earthquakes are very frequent.

No rivers of any importance join the Amoor from the eaſt, except the two above mentioned. The Nonni Ula, however, a very large river, which takes its riſe about the latitude of 51°, and longitude 123°, makes a conſiderable inland circuit, and empties itſelf into the Amoor at its ſouthern extremity, about the latitude of 47½°. Another conſiderable river, the Uſuri, loſes itſelf in the Amoor nearer its eſtuary, about latitude 48½°. It riſes from the lake Hinka, and has a communication, after a ſhort day's journey by land, with the ſea of Japan. It now flows in its own channel north-weſt into the ſea of Ochotſk, about the latitude of 52½°, oppoſite the iſland Sagha-alien. This river is well ſtocked with fiſh, and its borders are covered with foreſts of oak, walnut, birch, and different ſorts of pines. The ſoil is very rich, the climate mild and healthy. The inhabitants of theſe parts of the coaſt, as alſo of Corea, and the contiguous iſlands, are not very numerous, but extremely hoſpitable and good natured, and carry on a trade with the interior for mere neceſſaries.

* See page 19.

The

The Kamtſhadals, who have viſited the ſouthern Kuril iſlands, ſpeak very favourably of the honeſty and kindneſs of the inhabitants. *I hope, however, that I ſhall ſtill be able to give a better account of theſe unknown regions hereafter, from perſonal obſervation.*

I remained in Yakutſk with Captain Billings till the 2d of January 1794, when we departed in ſledges for the city of Irkutſk, where we arrived about the middle of the ſame month, and met with all the officers of the Expedition.

We were here informed, that Lord Macartney was in China on an embaſſy from Great Britain, which led to various conjectures; but had I received any intimation of his being expected there while I was in Kamtſhatka, or at Ochotſk, I ſhould moſt certainly have paid my perſonal reſpects to His Excellency in Pekin.

The following is all the intelligence that I could procure of Captain Billings's expedition acroſs the land of the Tſhutſki; and for it I am indebted to the journal of one of the party.

Auguſt 13.—" At nine o'clock this morning we departed from the bay of St. Laurence, and firſt croſſed to the ſouth-ſide, when the baidars were hauled ſometimes by the Tſhutſki, and ſometimes by harneſſed dogs running along the beach. We paſſed three villages belonging to the natives, and halted at a fourth for the night. The huts were dug under ground, and covered with earth. They were of a ſquare form, with a fire-place in the middle, and four large ſtones made the hearth. They have no wood, but burn the bones of whales, pouring the oil of ſea animals

mals upon them. Each ſide of the hut contains a polog, or low tent, made of leather, to ſit and ſleep in.

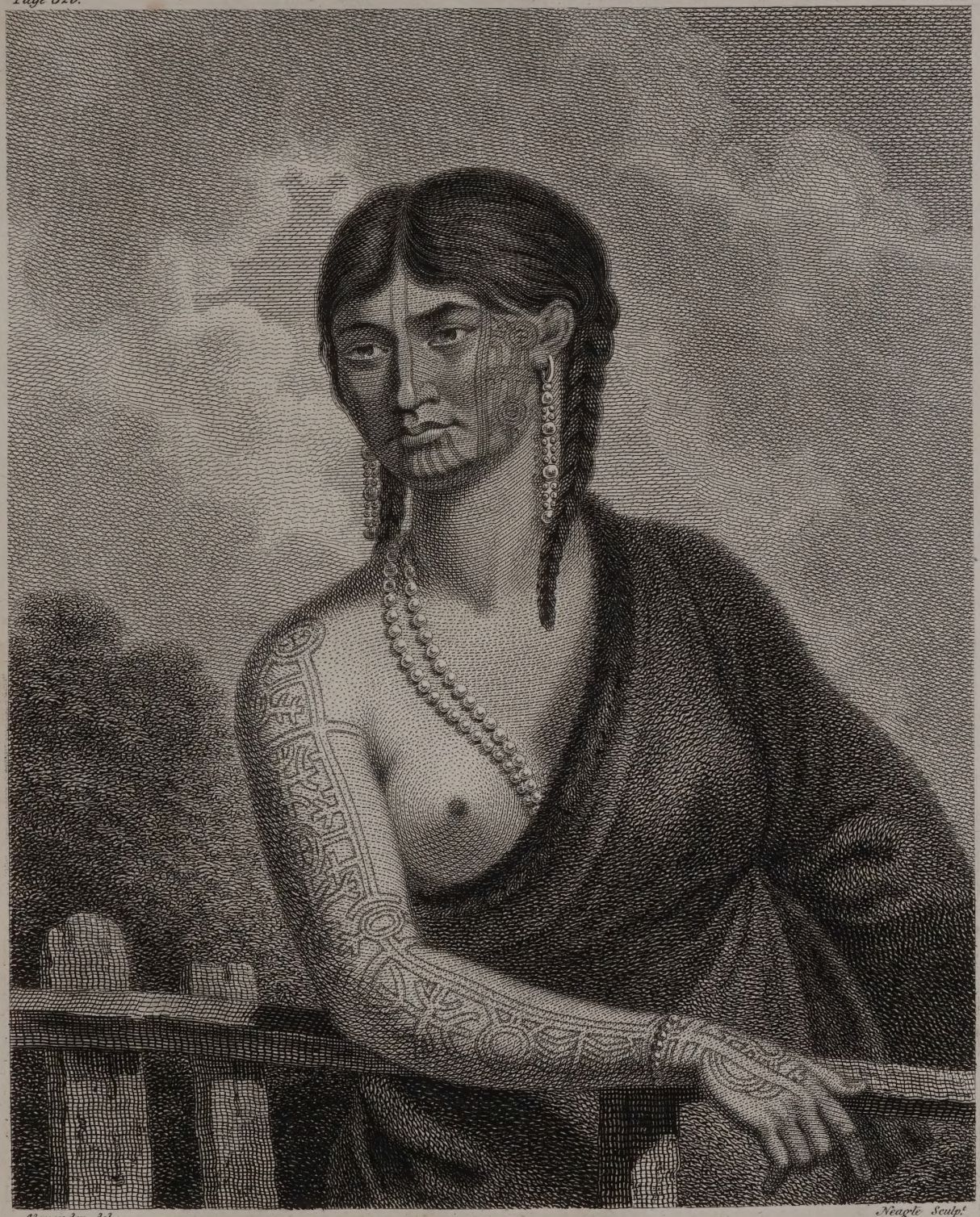
" Our firſt arrival among them did not promiſe much happineſs in their company; for, not knowing their language, we were obliged to treat with them by ſigns *, for fuel, water, &c. to boil our food, and pay for it immediately. Obſerving our good nature, and want of power, however, they at length took a liking to the buttons on our coats, which they cut off without ceremony; they alſo ſtole our ſnuff-boxes; and without any heſitation paid a viſit to our portmanteaus, in hopes of finding tobacco and iron.

" The men were tall and ſtout, dreſſed in a neat park (reſembling a carter's frock), made of the ſkins of different animals bordered, tight pantaloons of doe-ſkin, and boots of ſeal-ſkin; the head uncovered, and the hair cut ſhort. The warrior has his legs and arms punctured, ſo as to denote the number of the enemy that he has ſlain, and the priſoners he has taken.

" The women were alſo well made, above the middle ſize, healthy in their appearance, and by no means diſagreeable in their perſons. Their dreſs was of doe-ſkin, with the hair on; and one garment covered their limbs and their body: this is a park, with roomy pantaloons ſewn to it, and ſleeves down to the wriſts. They put the legs into the opening at the neck, where it ties, as alſo below the knee. Long boots of rein-deer's legs, with the hair on, are drawn up, and tie over the above dreſs at the knee. They wear their hair parted, and in two plats, one hanging over

* I cannot conceive where Dauerkin, their interpreter, was at this time.

each



Alexander del. Neagle Sculp.t

A Tshutski Woman.

Published March 2.d 1802, by Cadell & Davies, Strand.

Drawn by W. Alexander. Engraved by W. Cooke.

A Man in Armour with a Woman and a Child of the Tshutski.

Published March 2-1804 by Cadell & Davies, Strand.

each ſhoulder, their arms and face being punctured very neatly*, though almoſt every one differs from another in the figures. They wore necklaces, and had ſtrings of beads ſuſpended from the ears, as alſo iron or braſs rings round the wriſt.

" Auguſt 14.—At eight o'clock this morning we proceeded in our boats, or baidars, entered the bay of Metſhikma, and obſerved on the oppoſite ſhore (an iſland) a village of the ſame name. We croſſed this bay, and arrived at the camp of the Rein-deer Tſhutſki, who were to be our guides acroſs the country.

" Our reception by theſe people was very ſtrange. At firſt they oppoſed our landing; old and young, boys and girls, crying out and throwing ſtones in the ſea. After they had done this for ſome time, the chief (who is named Imlerant) appeared, with ſeveral old men, and made two fires; then took our commander by the hand, and led him over one of the fires; took off his own park, and put it upon Captain Billings, who, in return, put a clean ſhirt upon the chief: this exchange of dreſs is conſidered as a mark of friendſhip and mutual protection. The ceremony of croſſing the fires was impoſed on every one of us; and all our baggage, proviſion, &c. was alſo handed acroſs them. The chief then placed before us large pieces of boiled deers' meat extremely fat; and, to ſhew our ſenſe of his hoſpitality, we preſented him with tobacco, beads, and needles.

" At the ſetting of the ſun they commenced racing and wreſtling: it was not a race for ſpeed, but running round a ring for

* The annexed ENGRAVING, taken from an original Drawing, will ſhew the appearance of this their faſhionable ornament.

a conſiderable time; and he who held out the longeſt was the hero, and had the upper ſeat aſſigned him. The wreſtler who overcomes all the reſt is reckoned the moſt favoured, as among the Yakuti.

" 15th.—Imlerant, the chief, received the following preſents to divide among the people: 2 poods of iron; 2 poods of tobacco; about an equal quantity of beads; ear-rings, trinkets, and needles. Our interpreter was deſired to tell them, that, in return, we hoped they would aſſiſt us with food, warm clothing, and every neceſſary in their power; and, without any attempts to inſult, conduct us ſafely acroſs their country.

" 16th, 17th, 18th, and 19th, we had rainy weather. 20th, the herds of rein-deer were driven towards the camp, or tents, and halted on their arrival at the rivulet: upon which, two men went out with fire, and two women with ſmall buckets of oil; fires were made, and the deer driven acroſs them and the rivulet to the tents; when a round incloſure was made by the chief of each herd with the ſledges of the men, and the different herds were driven into the reſpective incloſures; the women's ſledges were placed between them and the ſea. Fuel was now added to the fire; the elder chief ſeized one of the deer, and gave it to his eldeſt ſon, who led it towards the ſea, ſtabbed it with his ſpear on the left ſide, and then looſened it. They pay particular attention to the manner of the deer's falling; if on the right ſide, and it dies eaſy, they ſuppoſe that it portends good fortune, and ſucceſs in their undertaking; but if it falls on the left ſide, or is convulſed, the omen is not propitious. This example was followed by the owner of every herd, each taking a handful of the blood of the ſtabbed deer, which they threw firſt towards

towards the ſun, then to the ſea, and laſtly to the mountains. When they had finiſhed this ceremony, and did not purpoſe killing more, the women ſkinned and cleaned the deer, and made fires where they had been ſlaughtered (every one ſeparate). They boiled meat, and rubbed the marrow on the faces of their idols, which they call Gir Gir (God). They have different gods,—as, of fire, of good and of evil. The idols are pieces of wood of different forms, with faces cut out, and ſerve for making fires by friction.

" The next day (20th Auguſt) they had a ceremonious feaſt. At ſeven in the morning three of the ſlaughtered rein-deers' heads (with the horns on, and the whole ſkin adhering) were placed on little benches, with two of the legs of the deer; whereupon, four of the oldeſt chiefs took each a tambour, and began beating, walking gently round, and muttering ſome words, raiſing the voice by degrees; at laſt they became clamorous, and danced. Having continued ſome time, the hoſt went to the ſmall tents (which are covered without light) and aſked thoſe ſitting there, " How are you?" We could not obtain any explanation of the meaning of any part of this ceremony. Upon his opening the polog, thoſe ſitting within it anſwered, " Chaiyua, chai-yua, chaiyua, lewnom lewnom;" which is, further, and further, and further,—better and better. After he had gone to all the ſmall tents, they continued the ceremony, as above, for a conſiderable time; and, upon finiſhing, the hoſt Imlerant went to our commander, took him by the hand, and ſaid,—" We old men pro-
" nounce from our obſervation, that all your undertakings will
" be attended with ſucceſs and good fortune; and God has ſent,
" for our benefit, the Ruſſians amongſt us in a friendly manner,
" for the firſt time, to explore our ſea, and reward us with li-

" berality. God ſend that we may be inſeparable allies for " ever *."

" Captain Billings immediately hung a medal round the neck of the chief, and aſſured the people of the protection of Her Imperial Majeſty, if their behaviour proved their ſpeech to be ſincere: upon which, they all bowed their heads, and cried out, " Chayua lewnom, lewno lewnom;" then they began dancing and ſinging, men, women, and virgins, till nine o'clock in the evening.

" The 22d, Captain Billings, Dr. Merck, Sturman Batakoff, Draftſman Varonin, and a ſailor, went to the village of Metſhikma; from which place Mr. Batakoff was ſent to ſurvey the bay.

" The 23d, we went on the hill to ſee the winter habitations of the ſtationary Tſhutſki, who ſtill reſide in their tents. Here were four earthen huts; but three of them ſo extremely filthy, that we could not enter. One, however, we got into; the entrance of which was formed like a watch-houſe with erect bones of whales; perhaps it is covered in bad weather. It was a hole dug in the earth, eight feet ſquare, and ſix feet deep. The roof conſiſted of whales' ribs and cheek-bones arched, nine feet high in the centre; the ſupporters alſo were whales' bones. There was a bench on each ſide; and the floor conſiſted of boards,

* Nicholai Dauerkin was interpreter. He is a native of the Tſhutſki; was taken priſoner when young, educated in Irkutſk, and ſent back to Anadirſk, with the rank of ſerjeant, to be interpreter between the Ruſſians and his own nation. This ſpeech appears to me quite in the ſtile of this man himſelf, and I much doubt the truth of his interpretation.

ſome

ſome of which lifted up for an entrance to the cellar, where they keep oils and their winter ſtock of proviſion. There was no fire-place, but a large diſh ſtood in each corner for the purpoſe of burning oil *. Part of the roof was ornamented with drawings of baidars, fiſhes, deer, ſledges, &c. We remained here till the 25th, when we returned to the tents of our guides.

" Auguſt 26.—The Tſhutſki thought proper to remove forward, and we proceeded to the top of a mountain 2 verſts and 25 fathoms, as meaſured by a line. Here we remained all the 27th.

" On the 28th proceeded on our journey, and croſſed a mountain overgrown with moſs. The next day we were joined by five tents of natives, and remained in this place till

" September 4, when we travelled one verſt and a quarter, and halted all the next day.

" On the 6th we travelled by the ſide of a rivulet no great diſtance, and halted till the 10th. The lakes were now frozen over, and we had 7° of froſt.

" September 11.—At eight this morning three rein-deer were killed with great ceremony, as a ſacrifice for the recovery of Owmulrat, ſon to one of the chiefs, who was taken ill. As ſoon as they had ſkinned them, they placed the ſick man between the three heads, ſo that his park, or garment, was over them. An

* The firſt huts they entered had a fire-place in the middle.

old

old woman whiſpered in the ears of the deer, and then walked round him, with lighted dried branches of juniper buſhes.

" 12th, The whole of laſt night was paſſed by a ſorcerer in incantations for the recovery of the ſick man. This night was paſſed in the ſame manner, and the magician was paid with rein-deer.

" 13th, We remained in the ſame ſituation.

" 14th, At nine o'clock this morning the favourite dog of Awmulrat was ſacrificed, being ſtabbed in the ſame manner as the rein-deer; blood from the wound was thrown three ways; the ſkin was taken off, the body ripped open, and the entrails examined. At noon the head was wrapped in the ſkin, and the ſick man led round the dog, having anointed his head with blood.

" 16th, We travelled three verſts and a half, and halted.

" 17th, We made one verſt over a mountain, and came pretty near the bay of Metſhikma again.

" 18th, Halted again. This evening, at eight o'clock, ſtrong north lights appeared.

" 19th, We travelled cloſe to the bay of Metſhikma."

The Journal continues in the ſame manner, without ſpecifying any particulars, or mentioning in what direction, until the 4th October,

October, when they were joined by the other interpreter Kobeleff, (a Coſſac Sotnik *).

" October the 5th, Captain Billings and Kobeleff went on before with 17 ſledges loaded with the whole of the Captain's baggage. (From this time the party behind the Captain ſeem to have ſuffered materially, with regard to food, &c.; and on the 9th the Tſhutſki ſtole the meaſuring lines.)

" 12th, Imlerant, the chief, and his wife, went on with 12 ſledges to overtake Captain Billings, to obtain ſome tobacco, &c. and to tell him to wait. We this day came to the river Ugnei, which falls into the bay of Klutchenie, and left the river on the left hand. Upon our halting for the night, the Tſhutſki compelled us to go back to the river, to ſeek on its borders ſome bruſh-wood to dreſs food. We had much ſnow and wind.

" 13th, This day we croſſed three lakes; the firſt of 300, the ſecond 400, and the third 300 fathoms. We now ſuffered conſiderably, and could plainly perceive it to be our interpreter Dauerkin's fault; who, when we halted for the night, aſſumed a right to prevent our getting meat; telling us, that we ſhould not have any, becauſe we had not collected wood. Hitherto we had received frozen meat.

" 14th, Arrived at the bay of Klutſhenie †.

* Commander of a hundred.

† I believe that the entrance of this bay forms the extreme point of Aſiatic land ſeen by Captain Cook, and called by him Cape North.

" 15th,

" 15th, We turned from the bay to the weſt, after travelling its borders to ſome diſtance, and paſſed the night by a rivulet.

" 16th, On account of bad weather, halted.

" 17th, Croſſed a mountain and two rivulets, and halted by a lake.

" 18th, After croſſing a mountain, we came to a conſiderable river called Chainana *, but we were 70 verſts from its diſcharge. This day we had nothing but raw meat allowed us, which we ate in a frozen ſtate.

" The 21ſt we overtook Captain Billings. He diſtributed preſents of tobacco, &c. among the Tſhutſki, who readily promiſed to feed us well, and uſe us better; upon which he again, on the 22d, went forward with Kobeleff and the Sturman's aſſiſtant Gilleeff.

" 23d, Numbers of Tſhutſki paſſed us, and pitched their tents at no great diſtance. The chief of our party went to them; and his brother robbed us of almoſt every thing that we had. However, he gave us plenty of meat, boiled and raw.

" 24th, The chief returned, and we croſſed a mountain.

" 25th, 26th, 27th, Halted.

* I take this to be the river that falls into the Icy Sea, a little weſtward of Klutſhenie Bay.—N. B. I obſerve, that this river, on the Ruſſian charts, is called Amga Yan.

" 28th, We this day came to a rivulet where we obſerved numbers of Tſhutſki.

" 29th, Halted.

" 30th, At nine A. M. the chief and I went on to Captain Billings, and received tobacco, beads, &c. upon which we returned to our comrades, and went to ſeek a feeding-place for our deer.

" 30th and 31ſt, Halted.

" November 1ſt, Halted. The reaſon of halting now, I was informed, was, to kill deer for the parties going to the Kovima, which was 250 * verſts diſtant from this place.

" 2d, I was ſent forward, under the charge of the ſiſter of the chief, with two ſledges, and went about three verſts, when we halted, and were afterwards joined by the reſt.

" 3d, Halted. The 4th travelled, I ſuppoſe, about 16 verſts.

" 5th, Came to a large river, about which ſeveral parties of Tſhutſki were travelling. We halted near a conſiderable body of them, having travelled, I believe, about 20 verſts."

The journal goes no farther; and I had no opportunity of procuring any explanation; but I believe this is the place where one attempt was made to maſſacre the travellers; in all probability,

* Perhaps the river Angarka is meant inſtead of the Kovima.

through the perſuaſions of Dauerkin * ; but the other interpreter, Kobeleff, ſuſpecting their deſigns from their motions and their converſation, acquainted Captain Billings with their intention, and immediately called the chiefs, told them that he knew what they were about, and ſaid, " We are all ready to die; but remember, our bones will be found, and raiſed by the Ruſſians, although you burn them to aſhes." Upon hearing this ſpeech of Kobeleff's, they conſulted together, and continued their journey, promiſing not to kill them.

The other remarks made by the writer of the journal that I have tranſlated, are ſuch as I have already taken notice of; except that the large baidars of the ſtationary Tſhutſki are all made of one ſize, and upon one plan, covered with the hide of the walroſs, and rowed with eight paddles. Beſide theſe, they have ſuch covered ones as the Aleutan iſlanders have, with one and two ſeats, but much heavier. The wandering tribes conſider themſelves more independent than the ſtationary, and will not allow their wives or ſlaves to have any intercourſe with ſtrangers; while the ſtationary tribes admit of this without any kind of heſitation, particularly with their ſlaves. Theſe, however, are treated very differently from ſuch as are free; and it ſometimes happens, that when the latter are not ſatisfied with their ſituation, they leave one man and go to another. I cannot give any further information reſpecting theſe people.

At Irkutſk every poſſible diſpatch was uſed to finiſh the part of our buſineſs which depended upon that government; and at

* It is my opinion, that this man, who was of a ſullen, jealous, and revengeful diſpoſition, found himſelf hurt by the confidence which the travellers placed in Kobeleff. He had entertained thoughts of rewarding his Tſhutſki friend, and appearing a man of conſequence among his countrymen; in which, however, he was completely diſappointed.

the

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FIG. 1. Pick-axe formed of the Tuſk of the Morzſh.

2. Stone Hatchet of America.

3. An Inſtrument uſed by the Tſhutſki in the chaſe of the Morzſh *.

FIG. 4.

* The original from which this repreſentation was taken did not come within my own obſervation; it is, therefore, not explained in my narrative.

It is a piece of wood to which the claws of the Morzſh are faſtened; the hunters, covering themſelves with the ſkin of the head of the Morzſh, make a ſcratching noiſe on the ice with this inſtrument; the Morzſh approaches it, when the hunter takes his lance, and, throwing off the maſk, ſprings ſuddenly upon the Morzſh, and ſtabs it.

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PLATE X. FIG. 4. Sepulchre of the Oonalaſhkans.
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* The armour is made either of lathwood, with thin bone, or if they can obtain them, iron hoops in preference; they are faſtened together with the ſinews of ſeals, ſo that they will bend both ways, and are covered over with leather, which is bound on with thin ſlips of whalebone, which gives it the appearance of ſo many hoops. They are replete with loops and buttons, upon which they hang their bow, arrows, &c.; the upper part occaſionally lets down.

ERRATA.

Page 13	line	25	*for* ſoal	*read* ſole
15	—	26	— 19th	— 9th
21	—	13 }	— Rhe	— Rheum
30	—	24 }		
26	—	22	— Pyat † Deſetniks	— Piat-Deſatniks †
42	—	16	— ripling	— rippling
—	laſt	line	— 800	— 300
45	line	11	— Iydomo	— Yudoma
—	—	24	— Ingigirka	— Indigirka
—	—	25	— irba's	— iſba's
47	—	23	— their cakes	— thin cakes
54	—	1	— Chap. V.	— Chap. VI.
57	—	26	— nodules	— needles
59	—	25	— faſtened	— hung
63	—	3	— 29	— 19th
67	—	1	— Chap. VI.	— Chap. VII.
82	—	1	— Chap. VII.	— Chap. VIII.
99	—	1	— Chap. VII.	— Chap. IX.
143	—	19	— ſouth-weſt	— ſouth-eaſt
144	—	9	— north-eaſt	— north-weſt
182	—	7	— Treeh	— Trech
227	—	17	— Alcha	— Atcha
276	—	1	— Suchanin	— Luchanin
296	—	5	— Rakivinoi	— Rakovinoi

the latter end of the month of January we ſet out for St. Peterſburg by the ſame route which we had taken hither. The Siberian inhabitants appeared rather more ſhy than they were in 1786; perhaps owing to the ſeaſon, it being lent. They alſo complained, that their intercourſe with the Mongals was not ſo open as formerly, the latter having retired to the Chineſe frontiers. The Tartar women about Tara were preparing nettles, and ſpinning thread from the fibres; the linen made of which was fine and good, apparently equal to that made of flax. I have already mentioned the neat carpets then made by theſe induſtrious people.

I was ſurpriſed at the appearance of detached families of Gipſies throughout the government of Tobolſk; and upon inquiry I learned, that ſeveral roving companies of theſe people had ſtrolled into the city of Tobolſk. The Governor thought of eſtabliſhing a colony of them; but they were too cunning for the ſimple Siberian peaſant; which induced him to ſeparate each family. He placed them on the footing of the peaſants, and allotted a portion of land for cultivation, with a view of making them uſeful to ſociety. They, however, reject houſes even in this ſevere climate, and dwell in open tents or ſheds; nor can they be brought to any regular courſe of induſtry; but they watch every traveller, and pretend to explain the myſteries of futurity, by palmiſtry or phyſiognomy. The peaſant dreads their power, and from motives of fear contributes to their ſupport, leſt they ſhould ſpoil his cattle and horſes. It is ſaid, that they are very ſkilful farriers and cowleeches.

I obſerved the whole way back a conſiderable diminution of trees; and in the vicinity of Ekaterineburg, and all the iron manufactories, where the road led through foreſts that appeared on

either ſide impenetrable, we now croſſed plains where hardly a tree was left ſtanding: this was the caſe nearly contiguous to the new made towns, and on the borders of the navigable rivers. Immenſe quantities of timber are floated down the Volga into the Caſpian and the Sea of Azof, for private and public uſes, as alſo for further exportation; and, as the generality of buildings throughout the interior of Ruſſia and Siberia are conſtructed of timber, fires frequently conſume whole towns and villages; nor have they any other fuel than wood; for, notwithſtanding pit-coal is in many places in great abundance, it is never made uſe of. It would be greatly to the advantage of the country to enforce the building with more ſolid materials, and to encourage the uſe of coal for firing; particularly for the different works that conſume much fuel *.

I arrived in St. Peterſburg on the 10th March 1794, ſo very much afflicted with the rheumatiſm, from a cold caught at Irkutſk, that in regard to action I was reduced to the helpleſs ſituation of an infant. The kind attendance, however, of Doctor Rogers, and the friendly aſſiſtance of the Britiſh merchants in that city, who are ſo eminently diſtinguiſhed for their unbounded hoſpitality, alleviated every pain, leſſened every difficulty, and prevented the miſeries of penury from being added to my misfortunes.

* Since my return from the Expedition, I have been conſtantly travelling about the ſouthern borders of Ruſſia, and have ſeen pieces of pit-coal in the Oka and Volga rivers; and all the country between the Dor and the Black Sea is replete with coal. Regular pits are ſunk about 200 verſts north of the ſea of Azof, by Engliſhmen in the employment of Mr. Gaſcoigne, for the uſe of the Black Sea fleet, and of an iron foundery lately built near the river Donets.

APPEN-

APPENDIX.

No. I.

VOCABULARY

OF THE

YUKAGIR, YAKUT, AND TUNGOOSE (OR LAMUT) LANGUAGES.

N. B. Ch muſt always be pronounced like the German *ch*.—*I* is always ſhort.

English.	Yukagir.	Yakut.	Tungooſe.
God	Chail	Tangra	Gheooki
Father	Etchèa	Agam	Amai
Mother	Amea	Iya	Eni
Son	Antoo	Oal	
Daughter	Marhloo	Keeſim	Ghoorkan
Brother	Tſhátſha	Oobagim	Akan
Siſter	Pawa	Agaſim	Ekin
Huſband	Yādoo	Erim	Edee
Wife	Alwáley	Yaghtarim	Akee
Maiden	Váiendéndi, Marchet	Keeſa	Choorkan
Boy	Luhundæ	Ogo	
Child	Lukoolu (in arms) Uwá (beginning to walk)	Kutu ogo, little boy	Kootian
Man	Toromma	Kiſſœ	Bey
Men	Toromma	Kiſſœlar	
Head	Iok	Baſs	Del
Face	Neatſha *	Sirai	Itti
Noſe	Iongul	Mooron	Ogot

* Neatſhaga, the ſkin of any animal.

Noſtrils

Engliſh.	Yukagir.	Yakut.	Tungooſe.
Noſtrils	Iongundangil	Tani	K-elon
Eye	Angzſha	Kaſak	
Eyebrow	Angzſhabugûelbi, alſo eyelaſhes	Chas	Karamta
Ear	Oonómma	Kugach	Korot
Forehead	I-óanguitſhel	Sūis	Omkat
Hair	Manallâe	Aſſim	Nioorit
Cheeks	Moonéndzſhi	Singak	Antſhin
Mouth	Angá	Aiyach	Amga
Throat	Tonmúl (hunger tonmulla)	Kaima	Belga
Lips	Anghenmóoga	Ooas	
Teeth	Tòdy	Tees	Itſh
Tongue	Onnór	Till	Enga
Beard	Angénbugūelbi	Buitik	Tſhurkan
Neck	Jomūel	Moinung	Mivon
Shoulder	Nungénmoogá	Saning	Mir
Elbow	Itſhe-endamey	Tongonock	Etſhen
Arm	Núngean	Illi	
Hand	Nugán		Gal
Fingers	Pe-enditſha		Kabr
Finger-nails	Onzſhil	Tingrach	Oſta
Breaſt	Mélud	Tueſs	
Belly	Líeril	Oſſogo	Oor
Back	Jewóghá	Sies, Kochſui	Neri
Feet	Noel	Attach	Boodel
Knee	Tſhorkel	Tuelgeſſo	
Heart	Tſhóoenzſha	Surach	Mewan
Stomach	Niméngſhinzſhá	Mungra	
Blood	Liōpkul	Ghan	Soogial
Milk	I witſhi	Ee-ut	Ookioolu
Skin, hide	Char, alſo clouds	Tiri	Nandra
Meat	Tſhul, alſo body	Et	Oolra
Bones	Amún	Umok	Ipree
Hearing	Mōēdik, heard, alſo felt	Iſſit	Iſni
Seeing	Umat, ſeen	Anar, Koer	Igoorun
Taſting	Tſhangitſh, taſte	Amtan	Amtam
Smelling	Lemlemoodel, ſmell	Sitta, Seligan	Moyeni
Felt	Moedik	Iſtebin	
Voice	Orni	Koemoya	Delgan

Talking

Engliſh.	Yukagir.	Yakut.	Tungooſe.
Talking	Aniak	Ittare, ſpeak, Kapſir	
Name	Nevĕ	Aatta	Gerbin
Scream, crying out	Orinak	Sangarda	Irkan
Outcry	Orool	Kittanar	Mogandra
Noiſe	Mungzſha	Yedeimeng	Ooldan
Crying	I-véllek	Ittir	
Tears	Angzhanondzſhi		
Laughter	No-ok, laughing	Koiller	
Sneezing	Tſhangnūi	Ittereer	
Scratching	Pandalitſh		
Trembling	Lirkúndzſhi	Tittirir	
Singing	Jagtak	Toy	Ikan
Sighing	Ningelamoditſh		
Whiſtling	Tſhundzſha	Iſſir	
Lie down	Kondāk	Sit	
Go	Ingherghodak	Bar	Choorli
Stand	Onghak	Tur	
To Sleep	Iūnzſhul	Tui	Ookladai
Dream, ſleeping	I-unzſhuk	Oomkella	Ooklean
Jumping	Moēnmōēnga	Ekerek	
Holding	Ma-ik	Tut	
Running	Tſhuenzſhi	Suir	
Dancing	Longdok	Inkullæ	
Love	Anoorak	Tapta	Googemon
Lover	Anooroh	Taptaſabit	
Glad	I-ak	Yarabin	
Joy	I-ai	Yurdim	
Sorrow	Artſhetſhúnzſha	Sanangatim	
Pain	Joatſh	Irridim	Eyen
Trouble	Ankorfy	Irridenim	Choonatſh
Work	Ooil	Illulatim	Goorgalden
Lazineſs	Alangnae	Surugaldzſhitim	Ban
I	Matak	Min	Bee
Thou	Tat	En	Boo
He	Tundal	Ginne	Nongenatſhe
We	Mitek	Buiſſiga	Nonganoobe
Ye	Titlak	Iſſige	Ellia
Eating	Langdal, ate	Aſſibin	
Thou eateſt	Tatlak	Aſſa	
To drink	Ondzſhok	Iſſiem	Koldakoo
To feed	Sagetak	Aſſiapin	

Engliſh.	Yukagir.	Yakut.	Tungooſe.
Taking	Mendzſhit	Illiem	
Carrying	Moream	Ildzſhi	Ghenoom
Throwing	Potſhitſhik	Brach	
Giving	Keick	Beer	Omool
		Give me aghal	
To cut	Tſhok	Buis	Minadai
Hiding	Angítak	Kiſtya	
Beating	Kogdak	Sienem	Madia
Strength	Tonboy	Kuiſtak	Egooi
Birth	Oo-inge	Terretpuit	Ekzſhecan
Race of people	Ommo	Omung	Beyil
Marriage	Torroi	Kurum	Awlan
Widow	Poóndalvólle	Erimſoch Yagtar	
Life	Liak	Olloruput	Inni
Body	Tſhul	Ettim	
Spirit or ſoul	Liéuſha	Tina	
Death	Amda	Elbuta	Kokan
Age	Ligai	Kerdzſhagas	Sagdi
Youth	Andelgoin	Edder	Noolfoolktſhan
Large or great	Tſhomoi	Oolachan	Ekzſham
Small	Lukun	Kutſhugai	Nukiſhookan
High	Pudanniai	Irduk	Gooda
Low	Ledemniē	Namtſhiltſhak	Netkookak
Cold	Pondzſhetſh	Timnee	Iguin
Warm	Pugatſh	Ettegas	
Hot	Pugatſh	Itti	Ghochſin
Health	Tauritſh (good) well	Ellérbuin, Ittugai	Abgar
Malice	Erritſh	Kuttir	Booktſhalran
Stupid	Evĕntſh	Mennek	
Wife	Onmanneig	Kerſie	
Agreeable	Naintallitſh	Ittugai	Ariooldooln
Sharp	Natſhennee	Sitti	
Round	Pomne	Tungruk	
Circle	Pomdzſhólené	Tungrutſhu	Mewreat
Ball	Loatſha		
Light (weight)	Arrángiā	Tſhiptſhik	Aimkoon
Heavy	Ningoin	Oorachan	
Strong	Addi	Kittanach	
Weak	Nóndri	Meltoch	
Tight	Iklon		
Thin	Ke-ivey	Sinnegas	
			Thick

Engliſh.	Yukagir.	Yakut.	Tungooſe.
Thick	Inglon	Soan	Derom
Broad	Kanbunnoi	Ketil	
Quick	Omduk	Turgan	Oomuſhat
Gentle	Anindzſha	Argooi	Etnioo
White	Po-innei	Irungk	Geltadi
Black	Aimáivi	Chara	
Red	Kelenni	Kaſil	Koolani
Green	Tſhakolonni, alſo yellow	Keoch	Tſhulban
Blue	Lubanzſhanni	Keochtinoo	
Sun	Jelónſha	Kuin	Nultian
Moon	Kininſha	Ooi	Begh
Stars	Lerungundſhia	Solus	Oſikat
Sky	Kundſhu	Chaltan	Gioolbka
Fog	Tarrel	Kudon	
Clouds	Char	Bullit	
Sun's ray	Jelondſhendigia		Elganee
Wind	Illejénnie	Tyil	
Blowing	Pookindſhi	Kotutar	
Whirlwind	Jadondajendelaia		Ghuee
Storm	Tſhemondilaia		Khuga
Steam	Leutſhénni (miſt)		Okſin
Rain	Tiba	Samir	Oodan
Thaw	Nunbur	Chaſing	
Hail	Jarchandiva	Tollon	Bota
Thunder	I-endu	Eting	Aſhdoo
Lightning	Borongille	Tſhagilgan	Tapkitan
Snow	Pukoélli	Char	Imandra
Ice	Iārka	Boos	Bookus
Fire	Lotſhel	O-at	
Light	Pondſhirka, alſo day	Sirdik	
Shadow	Ivi	Kuluk	
Dark	Emmitſh	Kharanga	
Day	Pondſhirka	Kuin	Ining
Night	Emmel	Tuin	Golban
Morning	Unhaiel	Erdee	Tek
Evening	Poinjuletſk	Ke-eſſe	Moorak
Eaſt	Jelongédukſhimba, ſun riſe	Kuintachſerra	
Weſt	Aivinda	Onga	
North	Ledinda	Illin	
			South

Engliſh.	Yukagir.	Yakut.	Tungooſe.
South	Pondzſhirka putel (mid-day)	Sogree	
Summer	Puga	Sacin, foyin	Anganal
Winter	Zſhendſha	Kiſun	
Autumn	Nada	Kuiſſin, kuiſan	
Spring	Pora	Saas	
Year	Nejunmolgul	Sil	Angan
Time	Indada	Tſhitſhimtſhee	
Earth	Levje	Sirr	Tor
Water	Ondzſhi	Oo	Moo
Sea	Tſhobul	Baighal	Nam
Lake	Jalgyl	Koel	
River	Onnong	Yrris, yrrach	Okat
Rivulet	Onnongi, nalitſha		Okatſhan
Waves	Moinchaija	Duogun	Bialga
Iſland	Ommul	Arre	
Sand	Nongha	Kumach	Ooneang
Clay	Glina	Boar	Telba
Duſt	Pogintſhi	Boar kotta	Ch-engelren
Dirt	Kundun	Barri	
(Hill) mountain	Pēa	Seer	
Shore	Ighil	Kittæ	Ch-oolin
Depth	Tſhāginmon	Dirring	Choonta
Height	Pudenmai	Irduk	Oſkiaſookun
Breadth	Kanbúnnai	Ketit	Demzſha
Length	Tſhitnai	Uſtata	Ghonamin
Hole	Kondzſha	Chaiagas	Changar
Grave, or ditch	Inghis	Een	Chooneram
Rock	Pea, alſo ſtone, mountain	Taas	Dzſhool
Iron	Lundal	Timir	
Salt	Logodúntſhinu, and Nimedzſhindſha	Tus	Tak
Weeds	Oolega, alſo graſs	Keoch	Orat
Tree	Tſhall	Maſs	
A wood	Jungul	Tya	Kenita
Root	Larkul	Turdæ	Kobkan
Stump	Koikél	Tſhongatſhok	
Bark	Tſhangar	Chalterik	Oorta
Branch	Tſhilga	Buſuk	Gar
Leaf	Paldſhitſha	Seberdak	Ebdernia

Flower

Engliſh.	Yukagir.	Yakut.	Tungooſe.
Flower	Poelri	Dzſhuſin	
Berry	Leviéndi	Otton	
Field (plain)	Pondſhórkoni	Chodu ſafir	
Beaſt	Talau	Koeil	Boyun
Fiſh	Annil	Balyk	Olra
Worms	Kalnindſha	Iyene	Ogil
Frog	Alundala	Baga	
Fly	Nilendoma	Zachſirga	
Ant	Jojakondzſha	Kmirdagas	
Spider	Managadaibi	Oguigos	
Argali, ſheep (wild)	Monogha		Ooyamkan
Dog	Tabaha	It	Nin
Mouſe	Tſhalbōe	Kutuyak	Tſhalooktſhan
Gooſe	Landzſha		Erbatſh
Duck	Ondzſhinonda, water-bird		Neki
Feathers	Pugelbi, or hairs of beaſts	Charungatſhæ	Detle
Eggs	Nontondaul	Simmit	Oomta
Neſt	Awoot	Oyo and Oyetto	
Shepherd	Itſhel	Manifit	
Hut	Numa	Balagan	Dzſho
Door	Anbandángel	Dzſhel	Oorka
Hearth	Eviér	Kolumtan	Nerka
Floor (earth)	Liebe	Sir	
Hatchet	Noomundzſhi	Sugai	Tabor
Knife	Tſhagoia	Buſak and Buhak	
Boat	Aktſhel	Bat	
Carrying	Elléyik	Teyachpit	
Building	Aak	Ongroch	
Cloaths	Māājil	Tangas	
Food	Lagul	Aas	
Raw	Onje	Sikai	
Dreſſed	Panduk	Buſar	
Thief	Olonunga	Orſach	Dzſhioormin
War	Neretſhángaté, and Chimdzſhingi	Serri	Chooniat
Quarrel	Illedangi	Jegu Yegu	Dzſhargamat
Fighting	Chimdzſhingi	Ellerſy	Koofikatſhin
Spear	Tſhovina	Innie	
Guard	Itſhell	Kettebil	Goodatſh

Diſtreſs

Engliſh.	Yukagir.	Yakut.	Tungooſe.
Diſtreſs	Oo-ilgaitſh	Aldzſharkoi	Urgadoo
Victory	Aldzſhitſh	Samnardabit	Dabdaran
Friend	Aghéma	Doghor	
Enemy	Irritſhundzſhitoroma evil diſpoſed man	Eſtiagun	
Servant	Poā	Kolutang	
Chief	Alnindſha	Toyon	
Writing	Tſhorillatſho	Surrui	
Numbers	Tſhungum	Achſi	
One	Irken	Bir	Oomun
Two	Antachlon	Ikke	Dzſhur
Three	Ialon	Ews	Elan
Four	Ielahlon	Tirt	Digon
Five	Enganlon	Bes	Tongon
Six	Malghialon	Alta	Kilkok
Seven	Purchion	Setti	Etgatanok
Eight	Malgialachlon	Ogos	Tſhokotenok
Nine	Chuniirki-ellendz-ſhien	Tagos	Tſhakatanok
Ten	Kuni-ella	On	Tſhomkotak
Twenty	Attachongoniella	Surbey	Katſhat-kotako
Beginning	Kudalaraga	Manna gitta	
Ending	Itſhagi	Kotſhu gitta	
Yes	Tat	Ak, ah, eh	Ya
No	Oiley	Soch	Atcha
Now	Indzſhi	Billigin	Dzſhoole
Before	Angnuma	Oonut	Eſſemek
After	Indada	Chodzſhit	S-ſi
Here	Tia	Manna	
There	Talay	Onno	Tala
Yeſterday	Nengandſhé	Beghaſſæ	
To-day	Pondzſhirkoma	Begun	
To-morrow	Ongŏiē	Sarſin	
Look	Tindij	Boo	Er
How	Kondamiel	Chaitak	On
Where	Kolae	Kanna	Illey
When	Chánnin	Kaſſan	Ok
What	Liomlentak	Tugui	Ek
Who	Chinetta	Kimimen	Ni
With what	Lumun	Tugonon	Etſh
Under	Tangmuinal	Allara	Ergudalin
Upon	Pudendago	Euſſæ	Widalin.

VOCABU-

No. II.

VOCABULARY

OF THE

LANGUAGES OF KAMTSHATKA, THE ALEUTAN ISLANDS, AND OF KADIAK.

Engliſh.	Kamtſhatka.	Aleutans	Kadiak.
God	Newſteachtſhitſh	Aghuguch	
Father	Iſ-ch	Athan	Ataga
Mother	Naz-ch	Anaan	Anaga
Son	Pa-atſh	L'laan	Avagatoga
Daughter	Sooguing	Aſhkin	Panigoga
Brother	K-tſhidzſhi	Choyotha	Ooyitaga
Sifter	Koſ-choo	Angeen	Alkaga
Huſband	Skoch	Oogeen	Ooinga
Wife	Squa-aw	Ai-yagar	Nooliga
Maiden	Ch-tſhitſhoo	Oogeghilikin	Aghanok
Boy	Pahatſh	Anekthok	Tanoghak
Child	Pahatſhitſh	Ooſkulik	Tſhagaloi
Man	Uſkaams	Toioch	Sewk
People	Quaſkoo, Uſkaamſit		Amalachtel-ſewt
Head	T-chooſa	Kamgha	Angloon
Face	Qua-agh	Soghimagin	China
Noſe	Kaankang	Anghoſin	Knak
Noſtrils	Kaang'a	Guakik	Padzſheeguak
Eye	Nanit	Thack	Ingelak
Brows	Tittan	Kamtic	Kubloot
Laſhes	Tſhuanit	Kochſaki	Chamagate
Ear	E-ew, E-ewt	Tottuſak	Tſhewdek
Forehead	Tſhilgua	Tanneek	Tſhoo-uga
Hair	Koobit	Emley	Neweyet
Cheeks	P-phaad	Ooluga	Ooluak

Mouth

Engliſh.	Kamtſhatka.	Aleutan.	Kadiak.
Mouth	Kuz-ha	Aghilga	Kannak
Throat	Quiqua	Stſhoka	Yoamun
Lips	K'kovan	Kotſhoon	Keh-look
Teeth	Kuppet	Aghalun	Choodit
Tongue	Nutſhel	Aghnak	Ooloo
Beard	K'ko-ookat	Inglaak	Oongai
Neck	Hitle	Oo-iyo	Ooyagut
Shoulder	Tanutar	Kanglee	Tooik
Hand, arm	Settoo	Tſha	Ai-igit
Fingers	P-koida	Atchon	Shovgait
Nails	Ko-uda	Chagelgin	Stoot
Breaſt	Ingátáh	Simzſhin	Tſhekiaiat
Belly	K-ſoch	Kilma	Akſ-yek
Back	Altſhoo	Tſhundra	Koak
Foot	Tſh-quatſhoo	Kita	Itiat
Heart	Nókguek	Kanogh	Kanok
Blood	Méſſon	Aamyek	Kaiook
Milk	Nókkol	Makthamtanga	Mook
Skin	Koo-ogh	Katſhka	Amek
Meat, or fleſh	T'háltal	Oolow	Kamok
Bone	T'hamtſhoo	Kaghna	Nenoat
Hearing		Toltakoning	Nitaa
Seeing	Kwatſhquikotſh	Okokthakon	Tangha
Taſte	Sa-ooſen	Katha	
Smell	Skeſich	Igutſha	Tſinago
Feeling		Sitchatſhada	
Talking	Kahalkan	Toonootha	Neogtok
Name	Hágaach	Aſſia	Atcha
Noiſe	Ki-ichkich	Imatſha	Tulchoo
Crying	Kooga-atſch	Kaighalik	Keagóok
Laughing	Kaſſoogaatſh	Aloktalik	Ingliachtoak
Singing	K-tſheemgutſh	Anogatha	Attoa
Groaning	Attaſich		Knaook
Lie down	Kanhilkitſch	Thirkaigada	Inaghna
Stand	Kaſichtſhitſh	Ankakthalik	Nanaghna
Go	Kowiſitſh	Itſha	Achook
Come	Koquaſitſh	Agatha	Taieechook
Running	Kaſchiatſh	Angaiakatha	Kemaktoak
Dancing	K-hogdaſitſh	Achatha	Chelagtoak
Love		Kingochthaka	Kanogata
Joy	Kabaſik	Iglai	

Grief

English.	Kamtſhatka.	Aleutan.	Kadiak.
Grief	Quadaſis	Alchologothik	Anchagooh
Pain		Nanalik	
Labour	Khaſus	Aguaſutha	
Lazy		Sochtalik	Kſatachtook
I	Komma	Keen	Chooi
Thou	Kiz	Ingaan	Chlput
Eat		Kaangen	Pittooaga
Drink		Taangatha	Taanagok
Take	Kommogata	Sulagna	Teooka
Strike	Takſu	Toogalik	Tſhuzſhutekew
Throw	Tſ-chluk	Ignekan	Ch-kakoo
Strength	Takaſna	Matalookan	Oonachkiktook
Marriage	Ktſhiza	Aſikſagathan	
Widow	Sooſoo	Oſchalik	
Life	Kaitaſitſh	Anghogikoo	
High	Koo-ung	Kaiakok	Kunachtook
Low	Iſ-ung	Kaielakon	Chkidok
Body		Ooluk	Kainga
Death		Aſchalik	Tokook
Big		Taangoellik	Angoch
Little		Aangonolokn	Meyoch
Cold		Kinganalik	Potſnatok
Heat		Tſhingleſelik	
Hot	Kikak	Akivachſelik	Nogtoak
Good		Tſhizſhelik	Azigtoak
Bad	Adkang	Matchizſhelikan	Kabigwaſkak
Wife		Siniktulik	Ooſewitok
Stupid		Anghagelikin	Naloo-oomok
Light, not heavy		Igthaghatok	Ogichtoak
Hard	Kittanua	Tungachſich	T-choak
Thick	Homono	Anatulik	Leegoak
Thin		Anatalokon	Amedoak
Broad	Kutenoo	Kaghtoolik	Kangatoak
Quick		Angaiak	Tſhukaladn
White	Attagho	Komakuk	Katchtoak
Black		Kaktſhiklúli	Toonongoak
Red	Tſhaang	Aluthak	Cowigtoak
Green	Nochſonne	Tſhidthgaiak	Tſhunagtoak
Blue		Kaktſhugthuk	
Sun	Qua-atſh	Akathak	Madzſhak
Moon		Toogithak	Eghaloak

Star

Engliſh.	Kamtſhatka.	Aleutan.	Kadiak.
Star		Sthak	Aghia
Heaven, ſky	Kochan	Inkak	Killak
Miſt, clouds	Miſſahan	Inkamaguk	Amaigalok
Wind		Mathuk	Kaiyaik
Rain	Tſhukutſhoo	Tſhiotakik	Kidak
Thunder		Shulukſhik	
Snow		Kaneek	Anneg
Ice		K'thak	Tſhigoo
Fire	Pangitſh	Kignak	Knok
Light		Anghalk	Tangeechſtok
Dark	Dochſae		Tamleſtok
Morning		Kilak	Oonamin
Evening		Angalikingan	Akaatoch
Night	Kolkwa	Amgik	
Day		Anghalik	
Eaſt		Kayathak	Oonulak
Weſt		Tſhedulik	Tchlanik
North		Kighaithok	Oaiſiak
South		Namatha	Ooagtok
Spring		Kanikinga	Ognakak
Summer		Seahkothok	Keegtok
Winter		Kanagh	Ookſogtok
Autumn		Seahkothoking	Ookſaghtok
Year	T-chaſioo	* Kanaghinalik	
Earth	Symt	Tſhekak	Noona
Water	Ee-ee, or i-i	Taangak	Taangak
Sea	Ningl	Alaghok	Imak
Waves	Kiaha	Thuk	
Iſland	Samatſh	Taangik	Kightak
Sand		Tſhooguk	Kaguyœ
Clay		Tſhikthuk	Kogoo
Mountain	Aal	Ghaiok	Ingat
Shore	Hite-ſhoo	Atſhida	Tſhaak
Hole		Tſhanok	Piaganok
Ditch		Tſhagak	Lagut
Copper		Kanuyak	Kaunooyat
Iron	Quatſhoo	Komlegu	Tſhauik
Salt	Pepum	Attagook	Tagaiook
Animal			Oongooalihat
Fiſh	Etſhoo		Ekachlewt

* Winter's approach.

Worm

Engliſh.	Kamtſhatka.	Aleutan.	Kadiak.
Worm	Chubbut	Lokaiak	Kobellewt
Fly	Quamoſtſh	Oolinik	Kwielewt
Plants	Sezda		Obovit
Tree			Kobogak
Bear	Kaſa	Tanguak	Tagookat
Dog	Koſsa	Uikuk	Pewatit
Fox	Tſhaſalhai	Okotſhing	Kaffiak
Gooſe	Kſoais	Llak	Nachklaiit
Duck	Alſhinguſh	Tſhakutſhadok	Sakoligak
Egg	N-gach	Shamlok	Mannik
Neſt	I-i-itſh	Tſhungangen	Oongolut
Hut	Kiſut	Ooladok	Tſheklewit
Door	Nutſhoo		Amik
Hatchet	Kvaſqua	Anigaſhip	Anigin
Knife	Watſhoo	Omgazſhizſhik	Tſhangielk
Kettle	Kukua	Aſhok	Aſok
Raw	Sohang	Kangakok	Ai-ce-patnok
To boil	Koquaſoch	Oonatha	Kannegtok
War		Saigik	
Thief		Tſhkalkan	Teglunachtoch
Quarrel	Situngſh	Amaghilik	Aieevoak
Spear	Quaquanutſh	Kadmaguſhak	Pannah
Friend	Kallal	Kinoghtaka	Tſhuaga
Enemy		Kinoghtatkakan	Tſhuugunitaga
Warrior		Kallochalik	Tſhekchuyak
Maſter	Annanum	Tokok	Anayakak
Servant	Tſheguatſh	Talha	
Yes	La	Aang	Aang
No	Iſki	Maſelikan	Pedok
Now	Daangoo	Angaiak	Chvenigpak
Before	Koomat	Angaiaktaſatha	Itſi-o-ak
After	Namſako	Amoomotaſlikan	Ettakoo
Nigh	Do-ok	Wagagnaghikok	
Far off	Niſch	Amathalik	
Here	Noot	Wallignakuk	
There	Onga	Amatkulikuk	
Yeſterday	Aati	Kéllagon	Koagh
This day	Daangoo	Vonangalik	Gaunegpek
To-morrow	Bokuan	Ilkellagon	Oonagoo
Where	Natſha	Channa	Nai-ee-ma
How	Nochkuis	Alkólli	

When

Engliſh.	Kamtſhatka.	Aleutan.	Kadiak.
When	Itta	Iyem	Kakoo
What	Nokai	Alkoſigtatima	
Raven		Kalkagiak	Kalnak
Eagle		Tinglak	Koomogik
Bow		Saidegich	Kitfiak
Arrow		Agidak	Chook
Darts		Agalgch	Pannah
One	Kemmis	Attakon	Alcheluk
Two	Nittanoo	Alluk	Malogh
Three	Tſhuſquat	Kankoon	Pingaien
Four	Tſhaſcha	Shitſhin	Stamen
Five	Koomdas	Tſhang	Taliman
Six	Kilkoas	Attoon	Agovinligin
Seven	Ittachtenu	Olung	Malchongun
Eight	Tſhoktenu	Kamtſhing	Inglulgin
Nine	Tſhaktanak	Sitching	Kollemgaien
Ten	Komtook	Haſuk	Kollen
Eleven	Diſukſin	Attakathamatkich	Alchtoch
Twenty	Kaſkumtuker	Algithematick	Suenak
Thirty	Tſhukumtuker	Kankuthematik	Pingaienkollen.

The Vocabulary of the Tungooſe or Lamut Language I obtained from Mr. Koch the Commandant of Ochotſk, who ſucceeded Lieutenant-Colonel Koyloff Ugreinin; the reſt were all taken by myſelf on the ſpot with great care and attention; and having had frequent opportunities to prove them with different natives, I can pronounce them correct.— There are many words in the Language of Kamtſhatka that I was not able to pronounce, and could not of courſe attempt to convey any idea of their ſound, which is the cauſe of ſo many blanks.

No. III.

A

LIST

OF THE

DIFFERENT STAGES FROM ST. PETERSBURGH;

Specifying the number of verſts according to which I paid for horſes; the time of arriving and departing from each ſtage, beginning each day at noon, and reckoning twenty-four hours to the day.

From St. Peterſburg	Verſts.	From Zimnagorka	Verſts.
To Tzarſco Zelo	22	To Yadrova	20
Izſhora	13	Zotilofſki	36
Toſni	23	Viſhne Volotſkoi	36
Lubani	26	Vydrapuſk	33
Tſhudova	32	Torzſhok	38
Spaſkoi Poliſti	24	Mednoi	33
Berezovoi	24	Tweer	30
Novogorod	22	Gorodki	28
Bronitſa	35	Davidova	26
Zaitſova	27	Peſki	31
Kreſtſi	31	Tſhornoi	23
Ezſhelbitſi	38	Moſco	28
Zimnagorka	23		

Places.

Places.	Verſts.	Date, 1785.	Time of Arrival.	Time of Departure.
From Moſco - -		Dec. 15.		4.
Novaja - -	24		7.	8.
Bunkova - -	34		10. 50	12.
Kerſhatſhi - -	34		16.	17.
Petuſhki - -	26		20.	21.
Undal - -	27	16.	24.	1.
Valadimer -	28		6. 30	7. 30
Tſhudogda -	39		13. 50	14. 30
Moſhok - -	30		19. 15	20.
Darſhevo -	27		23.	23. 30
Muroma - -	30	17.	2.	3. 30
Monakova -	25		7. 30	8. 30
Pogoſt -	29		15.	18.
Pavlova -			21.	
		18.		7.
Laſhkova -	33		19.	21. 30
Neizſhnei Novogorod -	34	19.	4.	9. 30
Beſvodnoi -	29		15.	19. 30
Tatnits -	27		22. 45	23. 40
Oſtaſhick - -	32	20.	2.	4.
Oſinka -	32		8.	9. 10
Yemangaſh -	32		11. 30	13. 40
Scartog -	22		16.	16. 35
Atchkarene - -	30		21. 10	23.
Tſhebakſar -	26	21.	3.	9.
Koſhki - -	30		16.	16. 40
Ganaſh - -	31		21. 25	24. 10
Veſovigh -	24	22.	4.	4. 30
Kazan - -	30		8. 30	

Places.	Verſts.	Houſes and Churches †.	Date, 1786.	Time of Arrival.	Time of Departure.
From Kazan			Jan. 10.		1.
To Beruli, village -	30	70		6.	6. 30
Arſk, city - -	26	100		10. 15	10. 45
		† 2			
Karadvan, village -	28	20		18. 45	20.
Jangulov - -	18	100		22. 40	24.
Gunbar - -	29	49	11.	5.	7. 50
Teremeſe - -	42	40		16. 45	17.
Vazſhintech-Kakſe -	26	17		20. 30	21. 10
Sumſae - -	20	36		23. 15	24.
Ubarie - -	14	25	12.	2.	2. 15
Kulmetſat - -	29	25		5. 30	6. 30
Zaitſi - -	38	20		10. 25	11.
Igra - -	37	25		17.	17. 20
Bolſhoi-Purga -	32	50		21.	22.
Debeſſa, village -	25	90	13.	1.	2.
		† 1			
Soſnova - -	52	200		10.	10. 30
		† 1			
Dubroffky -	25	35		13.	13. 20
Ochanoi, city -	26	60		17.	17. 45
		† 1			
Poldenoi, village -	16	20		20. 30	21. 15
Kultaiva	28	40	14.	1.	1. 15
		† 1			
Koianova -	25	80		8. 30	10.
Kriluſova -	37	100		19. 15	19. 45
		† 1			
Kungur, city -	20			22. 15.	
			15.		21. 30
Stretenſkoi, village	26	80	16.	2. 45	4.
Zolotuouſtofſky	19	330		7. 40	11.
		† 1			
Bukovi -	16	60		13.	13. 30
Atchinſky Krepoſt -	20	100		17.	17. 30
		† 1			
Biſirſki do. -	20	100		21. 15	23.
		† 1			
Klenoffky do. -	22	70	17.	3. 15	5.
		† 1			

Places.	Verſts.	Houſes and Churches †.	Date, 1786.	Time of Arrival.	Time of Departure.
			January.		
To Kirgiſhanſky Kreporſt	28	60	17.	12. 45	14.
Diogroboſſky do. -	23	100		17. 40	21.
		† 1			
Belimboiefſky Savod -	23	300	18.	23.	1.
		† 1			
Reſhotti, village -	26	10		6.	6. 15
Ekaterineburg, city -	21			11.	
			19.		8.
Koſulina, village -	24	24		12.	12. 45
Belojarſk -	24	30		17. 30	18.
		† 1			
Beliſki, village -	25	30		21. 30	22. 30
Chornoi Korova	24	30	20.	2. 15	3. 15
Kamiſhlov, city -	27	200		7. 30	8. 30
		† 1			
Buſhminſka, town	32	50		13. 50	14. 30
		† 1			
Kujarſky, village	14	15		17.	17. 30
Beloi Jalamſky -	14	40		19. 30	20. 15
Bela Kaſſka, town -	28	50	21.	1. 15	2.
		† 1			
Tugulunſka -	32	60		6. 30	7. 30
		† 1			
Uſpianſk -	22	80		12. 45	15.
		† 1			
Tumen, city -	30			20.	
			22.		1.
Kaſkara, village -	24	20		3.	4. 20
Soſonov -	22	45		9.	9. 25
		† 1			
Koſmakof -	21	30		14. 15	14. 30
Prokoſſky -	10	150		15. 45	16.
		† 1			
Uſolka -	12	80		18.	18. 15
Jarkova -	15	40		19. 30	19. 45
Artamenof -	9	20		20. 30	21.
Jevleff -	10	18		22.	22. 30

Places.	Verſts.	Houſes and Churches †.	Date, 1786.	Time of Arrival.	Time of Departure.
			January.		
To Antepena, village -	18	30	23.	1.	1. 15
Lipoſſky -	17	30		2. 30	2. 45
		† 1			
Baikaloff -	18	70		4. 20	5.
Turbayeſſky, tartar huts	23	40		8.	10.
Rechkoſſka, village -	25	7		13.	16.
Tabolſk, city -	25			20.	
			24.		19.
Bakſheva, village -	29	10	25.	24.	1.
Stara Pogoſt -	20	30		3.	4. 40
Kapotilova -	30	8		8.	9.
Dreſvanka - - -	31	6		16.	16. 45
Iſtitſki Jurti -	30	14		21.	21. 45
Kuſeradſka, village	41	30	26.	5. 30	6.
Golopopova -	56	30		17.	18.
Vikolov, town -	31	75		22. 30	23. 30
		† 1			
Otſhimova, village	46	30	27.	5. 20	6. 20
Zudiloſſky, for poſt -	58	30		17. 25	18.
Ribina, village -	36	20		22.	23.
Chaoonina -	40	20	28.	4.	7.
Leſſka, town -	30	70		12.	12. 30
		† 1			
Butakova, village -	38	40		18.	19.
Tara, city -	29			21.	
			29.		2.
Uſtara, village -	32	50		5.	6.
		† 1			
Reſhetnikoff, village	36	30		11. 15	12.
Artin -	14	30		14. 30	15.
Reſina -	52	80		21. 30	23.
Maraſhi -	24	20	30.	2. 30	3.
Nazareva -	12	80		4.	4. 15
		† 1			
Ghochlova - -	19	70		6. 30	7.
Vozneſenſka, town	20	100		10. 30	11.
		† 1			

Places.	Verſts.	Houſes and Churches †	Date, 1786.	Time of Arrival.	Time of Departure.
			January.		
To Tartarſki, village -	20	35		14. 30	15.
Turomova -	21	80		18. 30	19.
Pokroſka, town	17	70		21.	21. 45
		† 1			
Antofkin, village -	23	50		24.	24. 15
Bulatova -	18	75	31.	4.	4. 30
Kainſk, city -	33	125		7.	7. 20
		† 1			
Oſſinova Kolki, village	29	70		23. 45	24. 15
Kolmakov -	30	50	Feb. 1.	3.	4. 15
Ubinſky -	30	50		8.	9.
Kargan -	28	50		12.	12. 15.
Karbotſki, for poſt -	26	70		15. 45	16.
Kirgatſki Dubrovi -	25	50		24.	24. 30
Itkula, town -		100	2.		2.
		† 1			
Sektinſky, village -	47	66		5.	5. 20
Oftſhinikoff -	17	50		7. 45	8.
Sheligino -	26	70		11.	11. 15
Taraſhinſka -	20	30		14.	14. 15
Tſhauſhſka, town -	25	80		17. 15	17. 40
		† 1			
Dubrovina, village	40	8		21. 30	22.
Ajaſhinſk -	35	40	3.	2.	2. 45
Karaſina, village -	25	10		5. 30	7. 30
Chornoi Kaſtanits	33	20		10. 30	11. 5
Varuchina -	34	60		15. 20	15. 30
Kaltai - -	23	23		17.	17. 30
Tomſk, city -	24			19. 45	
			4.		23.
Semenuſhni, town	28	35	5.	2. 30	3. 35
		† 1			
Chaldeiſki, village	14	40		4. 15	5. 25
Turuntaiva -	22	40		8. 30	9.
Cleon -	40	30		17. 30	19.
Potſhitanti -	22	20		22.	22. 20
Berikul -	25	24	6.	2.	2. 30
Kiſkova, town -	52	60		12. 30	13.
		† 1			

Places.	Verſts.	Houſes and Churches †.	Date, 1786.	Time of Arrival.	Time of Departure.
			February.		
To Suſlova, village -	23	15	6.	14. 30	15.
Tezſhin -	28	60		18. 30	19.
Itat - -	32	30		23.	24.
Bogotolſki, town -	34	250	7.	4.	4. 20
		† 1			
Kraſnoreka, village	28	150		6. 45	7. 45
Archin, city -	28	150		11. 30	12.
		† 1			
Chornoi-rechka, village	32	60		16. 45	17.
Bolſhoi Kemtſhuk -	38	40		22.	23.
Maloi Kemtſhuk	35	26	8.	5.	5. 30
Zavedeva -	31	30		8. 30	9.
Kraſnojarſk, city -	25			12.	14. 30
Botoi, village -	24	102		17.	17. 20
Kuſkun, village -	23	35		21. 45	22.
Balai -	32	30	9.	1.	1. 40
Jarr -	24	60		5.	5. 30
Ribnia -	25	80		9.	9. 30
		† 1			
Klutch -	30	30		13. 15	14.
Uria - -	20	30		17. 30	18.
Kamſkoi Oſtrog -	25	70		21.	21. 30
		† 1			
Ilan, village -	20	15		24.	24. 30
Poim -	28	20	10.	5. 30	6.
Tini - -	18	10		8. 30	9. 30
Klutchi - -	28	5		14. 45	17. 30
Beruſa, town -	40	60		22.	22. 30
		† 1			
Bayronoff, village	21	20	11.	2.	2. 45
Rozgonia, hut -	24	1		6.	6. 45
Alzamai, village -	19	8		10. 30	11.
Zamſor -	32	10		15.	15. 30
Ook - -	35	10		20.	20. 30
Udinſk, city -	25	300		22. 20	23. 15
		† 2			
Singui, village -	30	12	12.	2.	2. 15
Shabatan -	30	16		6.	6. 30

Places.	Verſts.	Houſes and Churches †.	Date, 1786.	Time of Arrival.	Time of Departure.
			February.		
To Toolon, town -	46	130	12.	11.	11. 30
		† 1			
Saragool, village -	26	30		13. 30	14.
Kuilton -	41	70		18. 30	19.
Kamelte -	38	120		22.	22. 30
Zeminſk, town -	28	50	13.	1. 15	2.
		† 1			
Dolroi -	46	80		6. 15	7.
		† 1			
Kupulin -	29	100		10.	10. 15
		† 1			
Chiremchova -	28	80		12. 30	13.
		† 1			
Tatook -	38	110		16. 15	17.
		† 1			
Viligtui -	36	70		19. 30	20. 30
Irkutſk, city -	24		14.	1.	
			May 10.		6.
Kuda, town -	18	200		8.	18.
		† 1			
Oyok -	13	180		22.	22. 10
		† 1			
Buſinſki -	27	1.	11.	24. 30	1.
Olonſki -	30	1.		4. 50	5.
Bayendarſk -	30	1.		7. 15	7. 25
Kudunſa -	30	1.		10.	15. 30
Manſurka -	30	1.		19.	19. 30
Iſiet - -	30	1.		22.	23. 30
Katchuga Priſtan -	22	15.	12.	2.	

The following Villages we paſſed on the River Lena. Verſts reckoned from Katſhuga Priſtan.

Places.	Verſts.	Date, 1786.	Houſes.	Churches.
		May.		
Katſhuga, town	3	15.	70	1
Kiſhnova	14		10	
Vircholenſk	30	ſtaid till 16.	100	2
Unitſki	35		5	
Kuliofſki	54		6	
Kozlofſki	59		5	
Apuſhinſk	64	waited day-	6	
Kaſhinofſki	80	light.	16	
Zapleſhinſk	86		8	
Garaſovoi	90		3	
Pagofſki	97		21	
Verobrofſki	100		14	
Mikiſhinſk	107		6	
Apaſhinſk	119	17.	5	
Golovna	123		6	
Ardofſki	126		11	
Golovnofſki	128		10	
Kuznetſofſki	131		6	
Simeonofſki	132		7	
Balaganſkoi	135		12	
Ziranofſki	137		7	
Gigalofſki	140		13	
Uſtilga	170		50	1
Gruſna	194		9	
Botofſki	218		10	
Shamanofſki	228		15	
Golli	244		8	
Sherſtinova	251	18.	1	
Starſa	254		2	
Tomſkina	257		7	
Saroſſki	264		3	
Zagobininſki	284		9	
Baſofſki	299		7	
Dudkin	303		9	
Orlinga	324		20	1

Places.	Verſts.	Date, 1786.	Houſes.	Churches and Monaſteries †.
		May		
Povoſki	325	18.	15	
Pooliofſki	327		11	
Viſoka	334		7	
Taraſova	342		8	
Sedunofſki	344		8	
Scokniofſki	364		4	
Boyarſki	384		8	
Pavlova	394		1	
Omolofſki	407		6	
Sinuſhkin	413		3	
Riga	420	19.	3	
Turoka	454		8	
Uſkoot	469		20	1
Balachaia	480		9	
Yekurin	487		10	
Polovinoi	498		3	
Podimachinſkai	512		14	
Koſarki	513		10	
Kokooiſhka	531		4	
Ti-oora	541		10	
Nazarofſki	584		10	
Marakofſka	601		20	1 † 1
Tyra	615		10	
Ulgan	623		8	
Kaſemerofſki	633		3	
Kraſnoyarof	641	20.	4	
Levonofſki	649		3	
Potapofſki	655		6	
Lubofſki	674		4	
Karaſofſki	678		4	
Sheſtakova	683		2	
Gavrilofſki	684		2	
Panſkoi	685		5	
Balaſhova	688		2	
Makarova	690		11	1 † 1
Panſhina	702		2	
Zaborſkoi	705		12	
Krivalutſkoi	710		20	1
Vologinſk	713		5	
Lavruſhinſk	718		4	
Lazarova	725		5	
Menakofſkoi	730		2	

Places.	Verſts.	Date, 1786.	Houſes.	Churches and Monaſteries †.
		May 20.		
Tſhertofſkoi	745		2	
Kudrina	750		3	
Kulibakinſk	766		4	
Krivorotſkoi	772		15	
Kabarova	776	21.	10	
Varoninſk	777		15	
Kiringa	778		80	3 † 1
Nikolſki	780		4	
Zme-ina	790		9	
Alexeefſki	802		8	
Soltikofſki	815		19	
Podkaminoi	818		20	
Polovinoi	821		12	
Pikulina	824		4	
Borovia	825		2	
Meſovia	826		3	
Gerbova	828		20	
Banſhikoff	830		20	
Tſhigiofſki	838		25	
Grebenie	840		10	
Kondraſhinſk	844		12	
Veſnikova	854		20	1
Sukniova	869		20	
Spoloſhna	874		30	1
Kabalova	875		20	
Puſhinova	894		10	
Ilienſk	899		7	
Darinſk	919		10	
Izſhura	949		11	
Davidoff	963	22.	7	
Korſhunofſki	980		7	
Ivanuſhka	981		3	
Tſhaſtinſk	1004		2	
Varobiefſki	1041		1	
Kuraiſk	1070		4	
Poiſhina	1110		3	
Tſhuiſki	1157		7	
Vitima	1178		30	1
Pelidui	1205	23.	30	1
Kriſtofſki	1232		3	
Yelofſki	1259		4	
Pirkinſk	1293		4	

Places.	Verſts.	Date, 1786.	Houſes.	Churches and Monaſteries †.
		May 23.		
Ghamra	1309		3	
Konki	1336		2	
Tſhiooſka	1380	24.	3	
Muria	1405		3	
Silguil	1445		5	
Newye	1475		5	
Yerba	1505		3	
Ooſhakan	1540		2	
Yedai	1565		4	
Mackai	1595	25.	2	
Beroſova	1645		4	
Dolgoi	1678		3	
Nelena	1711		3	
Cheringa	1736		4	
Birt	1775		6	
Anyinſk	1798		9	
Alofinſk	1799		13	
Olekma	1807	26.	50	2
Solenka	1832		4	
Namania	1872		3	
Karabalyk	1912		3	
Chatin Tumul	1954	27.	2	
Murta	1976		1	
Sanayagtak	2018		2	
Malikan	2055		2	
Iſaki	2090		2	
Nevarchie	2125		2	
Umarie	2150		2	
Sinae	2180		2	
Batamai	2210		3	
Kitarie	2232		2	
Toiona	2274		2	
Biſtach	2301		14	† 1
Yakutſk	2390			

No. IV.

ACCOUNT

OF

The full Pay of the different Ranks, with other Dependencies; and alſo an Explanation of the uſual Deductions, according to the Regulation of 1782.

	Ro.	Co.	Ro.	Co.	
Captain of 1ſt rank -	600				
Allowed 6 Denſhicks; their pay each - -	6				
Which pay is underſtood for all Denſhicks of others					
Captain of 2d rank -	420				
4 Denſhicks					
Captain-Lieutenants, Majors' rank - -	300				
3 Denſhicks					
Lieutenants, Captains' rank -	200				
2 Denſhicks					
Midſhipmen - -	120				
1 Denſhick					
Upper Auditors -	240				
2 Denſhicks					
Auditors - -	100				
1 Denſhick					
Clerk, or Secretary -	72				
Skippers					
Of the 1ſt rank -	144				
1 Denſhick					
Of the 2d rank -	132				
1 Denſhick					
Commiſſary - -	100				
1 Denſhick					
Prieſts - -	120				

	Ro.	Co.	Ro.	Co.	
Surgeons					* According to their merits and abilities, their pay to be augmented or diminiſhed. † According to their attention, abilities, and deſert, to add or deduct; but never leſs than ro. 60, nor more than their full pay. ‡ According to merit, their pay to be increaſed or leſſened; but never to be leſs than ro. 24, nor to exceed their full pay in addition.
Each allowed 1 Denſhick	300				
	240				
	180				
	150				
Ships' Clerks -	36				
Sturmen - - *	138	* 40			
Pod Sturmen -	60				
Pod Lekars - -	84				
Pod Skippers -	60				
Timmerman (Ship Builders) †	90				
Boatſwains -	60				
Boatſwains' Mates -	36				
Sturmens' Learners - ‡	31	50			
Surgeons' Learners -	18				
Quarter-Maſters -	24				
Sailors 1ſt - -	11	14	5	36	Their uniforms to be given *in natura*.
Sailors 2d - -	7	64	5	36	
Cabin Boy - -	6	9	4	16	
Deſatnick of Plotnicks -	24				
Plotniken - -	15				From 12 ro. to 18 ro. according to their merit; but not to exceed this ſtipulated ſum.
Caulkers - -	15				
Sail-Makers' Mates -	15				
Smiths - -	15				
Coopers and under Coopers	15				
Boteleirs - -	24				
Under Boteleirs -	11	14	5	36	Their uniforms to be given *in natura*.
Trumpeter, 1ſt and 2d Claſs §	40				§ According to their knowledge of muſic and good behaviour their ſalary may be augmented or diminiſhed.
Kettle Drummers -	60				
Cooks 1ſt and 2d Claſs ‖	9	14	5	36	‖ Their uniforms *in natura*.
Profort - - ‖	6	14	5	36	
In the Sea Hoſpital					
Doctors - - 3 Denſhicks	800				
Stab Lekars - - 2 Denſhicks	600				
The Upper Prieſt of the Fleet above Church Characters	240				
Marines					
Major Præmier	300				

N. B. Denſhick is a Servant allowed out of the Ship's Company, not only whilſt at ſea, but alſo at quarters. This man may be let out to work, and the Officer receive the money that he gets by labour, as alſo his allowance of proviſion.

No. V.

INSTRUCTIONS

OF

HER IMPERIAL MAJESTY,

FROM THE

ADMIRALTY COLLEGE,

To Mr. Joseph Billings, Captain-Lieutenant of the Fleet, commanding the Geographical and Aſtronomical Expedition intended for the North-Eaſtern part of the Ruſſian Empire.

Her Imperial Majeſty, extending her maternal and unremitted care for the happineſs of her ſubjects to all, even the moſt diſtant, parts of her vaſt dominions, has been graciouſly pleaſed to order, as well with intent to furniſh them with better means of life, and to render them more happy and advantageous, as for the important advancement of ſcience, an expedition of diſcovery to the moſt eaſtern coaſts and ſeas of Her Empire; for the exact determination of the longitude and latitude of the mouth of the river Kovima, and the ſituation of the great promontory of the Tſhutſki, as far as the Eaſt Cape; for forming an exact chart of the iſlands in the Eaſtern Ocean extending to the coaſt of America; in ſhort, for bringing to perfection the knowledge acquired under her glorious reign, of the ſeas lying between the continent of Siberia and the oppoſite coaſt of America.

The execution of this Her Majeſty's intention is entruſted to you, as a ſkilful officer zealous for the ſervice of Her Imperial Majeſty; in full confidence, that the importance of this buſineſs with reſpect to the glory of Her Majeſty's ſacred name, and the intereſt of Her Empire, will excite you to fulfil the great expectations entertained of your abilities.

Her

Her Imperial Majeſty, agreeably to her wonted gracious and generous diſpoſition in all her uſeful and maternal commands, is pleaſed, over and above ſuch weighty incitements, for your greater encouragement to activity and zeal in the ſervice, to give you the rank of Captain-Lieutenant of the fleet; for which rank you have taken the oath, and received your patent; and, to favour you ſtill more, the officers and petty officers which you have demanded are named according to your own choice, as you will obſerve by the liſt annexed hereto.

At the ſame time Her Imperial Majeſty has graciouſly ordered, that from the day of ſigning this Inſtruction, until your return to St. Peterſburg, you and all under your command are to be allowed double pay, according to their ranks; to you according to the rank here granted, and to your ſubalterns according to the rank that they ſhall obtain at Irkutſk; which pay is to be given here, one year in advance; above which, to you and all your ſubalterns, a bounty of one year's pay for procuring neceſſaries for travelling.

Our Moſt Gracious Sovereign has alſo generouſly ordered, that at your arrival at Irkutſk, before you begin the execution of what is preſcribed in the following articles, you ſhall declare in Her Majeſty's name, to all officers and petty officers under your command, an advanced rank above what they bear, and have them ſworn accordingly; except thoſe only who are to receive gratifications in money, according to the annexed liſt.

Her Imperial Majeſty graciouſly orders you to declare yourſelf, in Her Imperial name, Captain of the Fleet of the ſecond rank, after having fulfilled the buſineſs preſcribed in the following articles on the river Kovima; in which rank you are then to take the oath.

When you have finiſhed your preſcribed buſineſs on the river Kovima, and along the coaſt of the Tſhutſki, at your return to Ochotſk, where every thing will be ready for your voyage to the coaſt of America, at the inſtant of going on board you are to declare, in Her Imperial Majeſty's name, an advanced rank to all under your command; to cauſe the oath to be adminiſtered to yourſelf, and to the reſt according to the above-mentioned liſt. Laſtly, at your arrival at Cape St. Elias you may declare yourſelf Captain of the firſt rank.

Thoſe of your ſubalterns who, according to their rank, ſucceed to the places of ſuch as may die, either a natural death or by accident, and who will be ordered to ſuch rank either by you or by the officer that may have the command after you, provided they produce a certificate of their good behaviour and zeal in the ſervice from the Commander in Chief, will on their return to Peterſburg be confirmed at the Admiralty College, in the name of Her Imperial Majeſty, in the rank conferred on them; and will be accounted in that rank from the day of their appoint-

ment. This is to be underſtood of thoſe who bear petty officers' ranks; thoſe who get into the denomination of upper officers, according to the above-mentioned order of advancement, will have equal advance with officers that go from hence.

In caſe any one of thoſe that go from hence ſhould die, be maimed, or loſe the uſe of his limbs, during the Expedition on the Tſhutſki coaſt, or the navigation from Ochotſk to the American coaſt; if ſuch perſon ſhould have a wife and children, the widows of the deceaſed ſhall receive until they marry again, or until their death, and the children till they come to their lawful term of years, half pay of what the deceaſed received during the Expedition; the maimed ſhall alſo receive ſuch half pay during their lives.

After having completed the buſineſs entruſted to you, on your happy return to St. Peterſburg, you, and all under your Command, will receive the defect of the double pay for the different ranks obtained during the Expedition; and, as a gratuity, a year's double pay according to the rank they return in; over and above which you and all your ſubalterns, returning ſafe, will receive for life the ſingle pay received during the Expedition, without accounting for what he may get for future ſervices.

Such gracious grants and further promiſes of protection, but moſt of all the importance of the truſt laid upon you, muſt excite in you a noble emulation to render yourſelf worthy of it, by endeavouring to do all in your power to fulfil the articles of this inſtruction, confirmed by Her Imperial Majeſty, and ſetting, by your unremitted endeavours, an example of zeal to all your ſubalterns.

ARTICLE I.

For your information are hereunto annexed fourteen charts of former navigators on the Northern and Eaſtern Ocean, and along the coaſts; as alſo of travels by land; to which are annexed ſhort extracts of the journals of the travellers, from 1724 to 1799. The plan of the veſſel preſented by you for inſpection is herewith returned; and you may, upon that plan, conſtruct veſſels at Ochotſk, if there be not one found there fit for your navigation. Annexed is likewiſe a liſt of Ruſſian towns, with the determination of the latitude and longitude of ſome; as alſo a model, according to which vocabularies of the different nations are to be collected. You receive alſo medals expreſsly made for you, to be employed with ſuch nations, the proper appropriation of which will be hereafter deſcribed.

You will receive herewith five thouſand rubles, to be employed in buying beads, knives, and other inſtruments, ſmall copper-kettles, and other ſuch trifles, to be employed as preſents to the ſavages who are fond of them.

You

You will alſo receive here mathematical and aſtronomical inſtruments, beſides others; and double pay, for you and all your Command, for one year advance; and likewiſe the above-mentioned bounty granted by Her Imperial Majeſty for you and all your Command, which you are to deliver againſt their receipts in the official receipt-book, of which twenty are given to you from the Admiralty for this purpoſe; as alſo for entering for the future all receipts and expences. After you have provided yourſelf with all neceſſaries for the journey, you are to proceed with all your Command, the ſhorteſt and moſt advantageous road to Irkutſk. You are to take care not to break your oath of keeping ſecret the buſineſs entruſted to you; and not to exceed, on affairs of ſecrecy, the ukaze of 1724, of which a copy is annexed for your information. You are not to open yourſelf on any account to any body about the meaſures or proceedings of your Expedition, unleſs ordered ſo to do; and much leſs ſo, to any body, this or any other inſtruction that may be given to you for the ſame purpoſe; you are alſo to give the moſt ſtrict orders to all your Command to this effect.

During your travels, if any very important accident ſhould happen to you, you are to give notice to the Admiralty College by expreſs; but in affairs of leſs importance, for example of the ſtate and place in which you are, ſend your reports by poſt. From the day of your ſetting out from Peterſburg till the very concluſion of your Expedition, you are to keep a journal very accurately yourſelf, and order your officers to do the ſame.

ARTICLE II.

When you arrive with your Command at Irkutſk, you are to deliver to the Governor-General of Irkutſk and Kolivan, Jacobi, or in his abſence the Vice Governor, the original ukaze of Her Majeſty directed to him; to which is added a copy of this your Inſtruction; and in which order is given, that all poſſible aſſiſtance be rendered at your requeſt for the ſervice of Her Majeſty. The Governor is to give you ſufficient directions for your journey to Yakutſk, Ochotſk, Izſhiginſk, and to the river Kovima. He is to provide you with an open ukaze, by which it is enjoined to all the commanders and chanceries of the places through or by which you, or any ſent by you (to whom you are always to give at their ſetting off your inſtructions for their journey), may travel, that they, upon your requeſt, give you all poſſible aſſiſtance, as well of hands as ſtores and proviſions; beſides, the ſame Governor-General is empowered by Her Majeſty's ukaze to give you another open ukaze, for the receipt of ten thouſand rubles for unexpected and extraordinary expences, which may happen during your travels; as alſo for travelling expences, and for the payment of ſuch men as you may, according to the preſcription of this inſtruction, employ in any part of Irkutſk. Of this ſum you may receive as much as is neceſſary,

ſary, and when and where you think fit; but for the money received, you, and the eldeſt officer next you, are to paſs your receipts, that you may know how much money is received and can be received on the ukaze. You are to require in each place where you take money, that he from whom you receive it ſhould endorſe upon the ukaze, how much, where, and when, the payment has been made; and the expences, with an account for what the expenditures have been made, are to be noted in the official book given by the Admiralty, with receipts wherever they can be procured. Stores and proviſions you are to receive, with conſent of your ſubalterns, mentioning, in the receipt which you give, the quality and quantity of goods received. You are not on any account to make any ſuperfluous or puzzling demands, only what is preſcribed, or ſuch as contribute in reality to the ſervice of Her Majeſty; nor expend any ſum upon what is not neceſſary, as you will be reſponſible for it.

At Irkutſk you are to endeavour, with the help of the Governor-General, to provide yourſelf, without the leaſt loſs of time, with all neceſſaries, and to get them tranſported to their reſpective places. You may, for forwarding buſineſs, detach from your Command upper and under officers for inſpecting, preparing, and tranſporting the ſtores collected to their places of deſtination.

If you ſee, by the liſt in the poſſeſſion of the Governor-General, that in the magazines at Ochotſk there is not a ſufficient quantity of proviſions and other ſtores neceſſary for duly arming and victualling the ſhips which are proper to be employed for your navigation, as alſo for your march to the river Kovima, and along the coaſt of the Tſhutſki; in ſuch caſe you are to requeſt the Governor-General to endeavour by all means to furniſh the magazines in due time with what is requiſite, and that the ſaid Governor-General may ſend an expreſs to the Commander of Ochotſk, with orders as well to ſupply ſuch wants, if there ſhould be any, as alſo to ſtop the veſſel that annually ſails with proviſions for Izſhiginſki Krepoſt in June or July, that you may be able to take the opportunity of ſaid veſſel for going to Izſhiginſk; and laſtly, that the ſaid Commander ſhould ſend orders to Petro Pavloſſky, or whatever other harbour of Kamtſhatka is thought more proper, for preparing there, againſt your intended voyage towards the coaſt of America, ſufficient quantities of dried fiſh and wild roots, and other eatable wild vegetables, for the ſupply of your people; enjoining, that at ſuch harbour ſhould be ſtationed in due time about twenty Kamtſhadals, uſed to a ſeafaring life, and well ſkilled in fiſhing and hunting, who are to accompany you in your voyage for the uſual pay.

At Irkutſk, you may examine and take your choice of five or ſix of the beſt ſcholars of the Navigation School, and take them under your command to employ them during your travels in ſurveying and drawing charts: theſe are to remain

with you till the concluſion of the Expedition, upon the ſame footing as the other petty officers that go with you from Peterſburg. Thoſe Uchenicks that were formerly ſent with Captain Krenitzen received fifty-four rubles annually; you may give them ſuch payment for one year for their equipment.

You are alſo to take with you from Irkutſk the naturaliſt Mr. Patrin, who will remain with you till your return with your Command to St. Peterſburg, in order to deſcribe ſuch natural curioſities as may be met with during the courſe of the Expedition: he will receive particular inſtructions for his buſineſs, and what he is to do in ſuch places where he will go with you, or where you ſhall think fit to ſend him, for deſcribing objects worth obſerving; you are to aſſiſt him, upon his requeſt, with hands, inſtruments, and money for executing his orders; giving him leave to ſtop for obſervations in ſuch places ſo long as circumſtances will permit, taking him along with you wherever you go to diſtant places. You may, if you ſhall think it neceſſary, receive from the Governor-General at Irkutſk, according to the imperial ukaze, another year's double pay for all your Command in advance.

Having received from the Governor-General all that is required for the Expedition, and all that may ſerve for your future and more circumſtantial information; having alſo executed all that is to be done at Irkutſk, and reflected on circumſtances that may happen during your further journey, you will then, without loſs of time, either by land or along the river Lena, as you ſhall think beſt, with ſuch of your Command as remains with you after making the neceſſary detachments, proceed to Yakutſk, or where you ſhall think it moſt convenient for the ſervice, or the intent of the Expedition. As you are ſtrictly to follow the directions of the Governor-General, ſo you have alſo to make your reports to him of your proceedings, of unforeſeen untoward circumſtances and hindrances in your journey to Ochotſk, and from thence to Izſhiginſk and to the Kovima; in order that you may, in caſe of neceſſity, receive directions from him how to proceed.

Laſtly, You are to repreſent to the Governor-General, that he is to give the moſt abſolute orders through his whole government, that nobody ſhould be curious in opening letters ſent by meſſengers with private reports, as it happened during the Expedition under the command of Captain Krenitzin the 10th of April, in the year 1768, at the port of Ochotſk, by the Commander Colonel Feodor Pleniſner.

Particularly at this time, and in this part of the Ruſſian Empire, moſt of all in parts lying beyond the river Lena, as far as you ſhall travel either by ſea or land, you are to determine as nearly as poſſible the longitude and latitude of remarkable places, the variation of the compaſs; to form ſurveys and charts; draw remarkable views of coaſts, with the ſituation of bays, inlets, and roads; and mark their advantages for trade, fiſheries, &c.; likewiſe to obſerve and deſcribe the time, ſtrength, riſing,

riſing, and irregularity of tides and currents; alſo of rocks under water, ſhoals, and other dangerous places; the ruling, variable, and trade winds; the changes of weather; meteors, particularly Aurora Borealis; the ſtate of the electricity of the air during theſe meteors, and their influence on the compaſs; laſtly, the changes of the barometer and thermometer.

Moreover, Mr. Patrin will have particular inſtructions reſpecting his obſervations in natural hiſtory: however, you are never to neglect, eſpecially when he is not preſent, to obſerve the nature of the ſoil accurately, and of the productions of the country where you find yourſelf; you are diligently to collect ſeeds, ripe fruits, and dried plants, branches and pieces of the wood of remarkable trees, their barks, reſins, and gums; alſo ſea-weeds, zoophytes, ſhells, fiſhes, amphibious creatures; inſects, birds, and other animals; taking off and ſtuffing the ſkins of ſome, and drying and preſerving in ſpirits others. You are likewiſe to collect ſpecimens of ores, foſſils, ſtones, ſalts, earths, and ſulphurs; noting the place where each were found or caught, and at what time.

To prevent ſuch collections being ſpoiled by accidents, you may leave them in ſuch places as you think proper, where you may take them up at your return to St. Peterſburg. If in ſuch places there ſhould be a commander, you are to deliver them to him, taking a receipt. If the places are not inhabited, put them in remarkable ſituations, where they will be ſecured from weather and deſtruction; or, ſtill better, ſend them along with your reports and their deſcription, under your ſeal, to the Governor-General of Irkutſk.

You are likewiſe to make, if poſſible, circumſtantial deſcriptions of the quality and uſe, and even drawings of the moſt curious productions of nature; you are to enquire accurately about the number, ſtrength, natural diſpoſitions, manners, and occupations of the inhabitants of unknown places; likewiſe order to be made vocabularies of their language, after the model given you; endeavouring to expreſs as nearly as poſſible the pronunciation of their words in Latin and Ruſſian characters. Laſtly, you are to procure, (or, if that be not poſſible, to get painted, or deſcribe) the furs, dreſſes, arms, and manufactures, of ſuch nations.

ARTICLE III.

Upon your arrival at Yakutſk, you are to apply yourſelf immediately, to execute what the Governor-General may think neceſſary to prepare for your further journey to Ochotſk; and during your ſtay there, by virtue of your open ukaze, which orders all Commanders and Gorodnitſhi of the towns through which you paſs, to give you all neceſſary aſſiſtance, you are to require abſtracts of accounts to be

found in the archives of late navigators, and of all that can give information about your main buſineſs upon the Kovima, and round the coaſt of the Tſhutſki; and if you find by ſuch liſts or abſtracts that there is any thing ſurpaſſing the extracts communicated to you at St. Peterſburg, and you think them neceſſary, you may demand copies of them; and if there be any charts get them alſo copied.

Wherever you produce the open ukaze of the Governor-General of Irkutſk, you may permit to ſuch perſons as it regards to take copies of it, in caſe it ſhould be neceſſary. You may, if you and the Governor-General ſhould think it convenient to be done at Yakutſk, and not by preference at Ochotſk, Izſhiginſk, or even the Oſtrogs upon the river Kovima, pick out the neceſſary number of Coſſacks, ſoldiers, interpreters, and guides, chooſing preferably hunters, and ſuch as are recommended for their ſkill and good behaviour, and who have been upon the Kovima; and of ſoldiers ſuch as were formerly in garriſon at Anadirſk, have converſed with the Tſhutſki, frequented their habitations and the environs of the Kovima, and the coaſt of the Frozen Ocean (ſome even were born among the Tſhutſki); with theſe people you may, in preſence of the Commander of the town, either make an agreement, or pay them without agreement, double the ſum that is uſual there for people who are hired for a term to ſerve at ſea; which they are to receive from the time you take them under your command, till you diſmiſs them at the cloſe of the Expedition, or till their death, inſcribing this pay in a particular official book; and you may promiſe in the name of Her Majeſty, to ſuch as offer themſelves volunteers, that at the happy return from the Expedition they ſhall receive a gratuity of one year's pay, as received during the Expedition, for their ſervice.

Following the example of your predeceſſor Captain Krenitzin, who was ſent in 1764 to theſe ſeas, you may, if you think it conducive to the ſervice, and for more expedition, which in all your proceedings is hereby much recommended to you, order at Yakutſk (as he did in 1765) rope work to be tarred, and proviſions packed in bags and caſes, each containing no more than two poods and a half weight; and when you have got the neceſſary quantity of proviſions in readineſs, ſend part of them off, under command of an officer inſtructed by you, and furniſhed with all neceſſaries, loading on each horſe no more than five poods, on account of the many bogs, rivers, and mountains, which are to be paſſed. Yourſelf may follow in the ſame manner with the reſt of the proviſions, ſtores, and men. To prevent hindrances on the road to Ochotſk, you may deſire the Commandant of Yakutſk to ſend off an expreſs, preparing neceſſaries for your journey.

ARTICLE

ARTICLE IV.

When you have furniſhed yourſelf with all neceſſaries at Yakutſk, you muſt make your diſpoſitions to complete the tranſport which is already ordered before, of proviſions neceſſary to maintain your party during your ſtay upon the Kovima, and the coaſts of the Frozen Ocean. If you ſhall think it neceſſary to have ſome Coſſacks to form this party, and if you can find ſuch as have been before upon this river, or upon theſe coaſts, you may make choice of ſuch either at Ochotſk, or at Inzſhiginſki Krepoſt.

ARTICLE V.

Laſtly, in order that you may beſt employ your time, endeavour to arrive at Ochotſk at the ſame time nearly with your ſubalterns, to chooſe there the ſailors and Coſſacks who are to follow your Expedition by land and by ſea. You muſt alſo chooſe, from among the pilots of that port, two or three who have ſufficient knowledge of thoſe ſeas, and whoſe ſervice you ſhall think moſt conducive to the ſucceſs of your navigation. On your recommendation, they will enjoy the ſame advantages as the reſt of your Command. Each of them is to ſelect for his aſſiſtant one of the Utſhenicks of the Navigation School of Ochotſk.

At Ochotſk you are to make all neceſſary preparations for the ſea voyage preſcribed hereafter in the 10th Article. In caſe not one of the veſſels in actual ſervice there ſhould be ſafe enough for ſuch a diſtant navigation, you muſt then take your meaſures for conſtructing two veſſels of ſufficient ſtrength and convenience, to anſwer the purpoſe and preſerve the healths of the crew. Of one of theſe veſſels, at the time of navigation on the coaſt of America, you will have the command, and the command of the other will be given to the ſecond in rank; for the ſafety of the crew, and the ſucceſs of the navigation, depend on the veſſels of the Commander in Chief being accompanied by another. In order to enforce their conſtruction, orders will be given immediately to the Governor of Irkutſk, that the beſt ſhip timber to be found about Ochotſk ſhould be prepared, and all ſtores got in readineſs for fitting out one ſhip of eighty feet in keel, and another of ſmaller dimenſions, by virtue of the open ukaze which the Governor-General of Irkutſk and Kolivan is to give. You are to demand from the Commandant of Ochotſk the neceſſary number of carpenters, and all requiſite aſſiſtance towards conſtructing and fitting up your veſſels. You are empowered to give the ſuperintendance of the docks to one or more of your ſubalterns, and to your ſhipbuilder, in order that the building may be carried on with all poſſible ſpeed,

and

and entirely according to your plan. You muſt likewiſe order at Ochotſk a certain number of poſts of durable wood to be prepared, which are to be erected on ſuch lands as may be newly diſcovered by you; theſe poſts you will ſtow in your ſhip when you ſail for America.

ARTICLE VI.

When you have made theſe preparations, and collected from the Archives at Ochotſk what information and journals relative to your Expedition may be found there, you may then without loſs of time, with part of your Command, which you have choſen at Ochotſk, and with Aſſeſſor Patrin, proceed on the readieſt way to the Kovima. It will be proper to go as lightly equipt as poſſible on board the veſſel which ſails in June or July with proviſions for the garriſon of Izſhiginſk; at that place you will find the beſt Coſſacks and ſoldiers for forming your party, as ſome of them heretofore compoſed the garriſon of Anadirſk, and have had connexions with the Tſhutſki, and others were even born and travelled amongſt them. With theſe you may march over to the river Omolon, down which you may float on rafts to the Kovima. Arrived at the Kovima, you are to make geographical and aſtronomical obſervations of the latitude and longitude of Virchnoi and Neizſhnoi Kovimſki Oſtrog, and the mouth of the river; and to take an accurate ſurvey of it, obſerving the ſoil and inhabitants of the adjacent country.

ARTICLE VII.

Having determined with all poſſible accuracy the ſituation of the Kovima, and deſcribed its courſe and the ſoil over which it flows, you are to endeavour, if circumſtances permit, to make uſe of boats called Shitiki, conſtructed as ſtrongly as poſſible, to coaſt along the promontory of Tſhutſki from the mouth of the Kovima to the Eaſt Cape. In caſe, however, the coaſting by ſea ſhould be found abſolutely impracticable, and the information received on the ſpot give you hopes of reaching it by land, you may then proceed thus to deſcribe theſe coaſts, going in winter over the ice. It may happen, that by theſe means you will diſcover iſlands or lands that may lie to the north of theſe coaſts, and of Bering's Straits. You may continue your travels and enquiries, employing different means as far as circumſtances, ſafety, and the good of the ſervice, require. You are to make an accurate chart; lay down the remarkable places that appear; take views of the coaſt and remarkable objects; endeavour alſo to get as much information as poſſible of the country of the Tſhutſki, their ſtrength and manners; and, wherever opportunity offers, to contribute by your behaviour to the ſubjection of this nation to Ruſſia, and to the good opinion of the mild government to which they ſubmit.

ARTICLE VIII.

Whatever ſucceſs the trials on the Kovima, and from thence along the coaſts of the Frozen Sea, may have, after having done all that it is poſſible to expect from your zeal, return from thence by the beſt route to Ochotſk, to finiſh there the laſt preparations for your navigation in the Eaſtern Ocean, to take command of the people, and of the ſhips built or choſen for the Expedition. To the officer who will have the command of the ſecond ſhip you are to give the full complement of ſturmen and ſailors, inſtruments, ammunition, proviſion, and other neceſſaries for the ſervice. This officer is to follow exactly your orders, ſignals, and inſtructions.

ARTICLE IX.

If on any unforſeen account the ſhips ſhould not be in readineſs, then you may, awaiting their being built, employ the ſpare time and your talents in uſeful diſcoveries, on the ſea between the Kuril iſlands, Japan, and the continent of China, even the Corea; and endeavour to bring to perfection the charts of theſe almoſt unknown parts of the ſeas; for this purpoſe, you may employ any one of the packet-boats or galliots belonging to the government at Ochotſk, which you ſhall think fitteſt for the ſervice, and part of your detachment. This ſecondary point, however, muſt not make you loſe ſight of the principal object of the Expedition, which you muſt endeavour exactly to fulfil.

ARTICLE X.

When your ſhips are perfectly loaded, armed, and proviſioned at Ochotſk, you are, in company with your ſecond veſſel (alſo taking under your convoy the merchants' ſhips that chooſe), to ſail in the moſt favourable time for doubling the extremity of Kamtſhatka; you are to call at the port of Petro Pavloſky, or at Kamtſhatka, at whichever of the two the proviſions mentioned in the 2d Article are collected. Theſe, as alſo the Kamtſhadals ordered there for the purpoſe, you will diſtribute to both ſhips; you are then to continue your voyage for ſurveying the whole chain of iſlands extending to America, or for the diſcovery of new ones.

You are to make it a principal point of your duty to draw up an accurate chart of theſe iſlands, determining their ſituation by frequent obſervations; and, endeavouring to get a knowledge of the beſt harbours, roads, &c. to be found on them,

them, you will extend theſe enquiries even to the coaſt of America; and chiefly direct your attention to the iſlands hitherto little frequented, and not well known, which lie along and ſouth of the coaſt to the eaſtward of the iſland of Oonimak and the great promontory of Alakſa, which is part of the continent. Such iſlands, for example, as Sanajak, Kadiak, and Leſnoi, the iſlands of Shumagin and Toomanoi, ſeen by Bering and others.

During your navigation in theſe ſeas, if you ſhould meet with other ſhips, under Engliſh, French, or other European colours, you are to behave in a friendly manner, and not give occaſion for diſpute.

ARTICLE XI.

Having uſefully employed the ſummer in theſe enquiries, you may, at the ſetting-in of the ſtormy ſeaſon in autumn, look out for a proper harbour, either in America, or on the iſlands lying in theſe ſeas, or in Kamtſhatka, there to winter and refreſh your men; and you may again continue your endeavours and enquiries when the favourable ſeaſon returns.

ARTICLE XII.

As ſome indications obſerved by Captain Bering on his ſailing towards America, and which were confirmed by the Engliſh Captains Clerke and Gore at their return from the Sandwich iſlands to Kamtſhatka, give reaſon to conjecture that there are iſlands ſituated to the ſouthward of the known chain of iſlands, and to the eaſtward of the meridian of Kamtſhatka, between forty and fifty degrees of latitude, you may try, on your going, or in your return, to diſcover theſe unknown iſlands, and get information reſpecting them, for the good of the trade of Kamtſhatka; not, however, loſing too much time on theſe uncertain trials.

ARTICLE XIII.

You are authoriſed to make enquiries about ſuch parts of the continent of America as former navigators could not well ſurvey on account of bad weather; chiefly endeavouring to diſcover their beſt harbours, which may ſerve in time for opening a fur trade with the inhabitants of the Continent; and in all caſes principally endeavour to get a knowledge of the different productions of the Continent, iſlands, and adjacent ſea, as preſcribed by the 2d Article.

ARTICLE XIV.

For this reaſon you are to give the naturaliſt, Mr. Patrin, whenever he requires it, full liberty, with neceſſary aſſiſtance, and furniſh him with opportunities to do his duty; leaving him on ſhore as long as the ſervice permits in ſuch places as he may think worthy of obſervation, or ſending to ſuch places as he ſhall indicate. The obſervations, enquiries, and collections, which he will make in his way, you are to leave at his entire diſpoſal till your arrival at Peterſburg, whither he alſo is to return to deliver them.

With reſpect to every thing that regards the reports which you are from time to time to make during your Expedition, he may alſo avail himſelf of the ſame opportunities, and deliver you extracts and reſults of his obſervations, in the language wherein he may be able moſt clearly to expreſs himſelf. If by any accident, or illneſs, Mr. Patrin ſhould not be able to proſecute his reſearches, then you are to take care of his manuſcripts and collections, ſealing them up in the beſt condition till he recovers, or, if neceſſary, till your return.

ARTICLE XV.

On ſuch coaſts and iſlands as you ſhall firſt diſcover, whether inhabited or not, that cannot be diſputed, and are not yet ſubject to any European power, you are, with conſent of the inhabitants (if any), to take poſſeſſion in the name of Her Imperial Majeſty the Sovereign of all the Ruſſias, of the places, harbours, and all advantages which you think uſeful, in the manner preſcribed in the following Article.

ARTICLE XVI.

When you bring under Ruſſian ſubjection newly-diſcovered and independent nations, or people, you are to obſerve the following directions. As ſuch people have moſt probably never been inſulted by any Europeans, your firſt care muſt be, chiefly to give them a good opinion of the Ruſſians. On finding ſuch a coaſt, iſland, or promontory, you are to ſend one or two baidars, with armed men, under command of an experienced ſturman, with interpreters, and ſmall preſents with them. Let them look out for a harbour or bay to ſecure your veſſels in; when ſuch are found, take the ſoundings and go in; but if ſuch harbour cannot be found, you may then ſend baidars, or boats, with part of your Command, on

ſhore, to examine if there be inhabitants, foreſts, animals, &c. They are not to land all together, but leave a guard over the boats; and the landed party are not to ſcatter, but keep together. If there are inhabitants, they are to ſpeak to them by interpreters, who are never to be ſent alone, but accompanied by ſome men ſecretly or openly armed; for it has happened, that ſavages have killed or carried off interpreters, to the no ſmall diſappointment of the diſcoverers. The interpreter is to ſpeak to them, as from himſelf, of your friendly intentions; to ſhew which, he is to give them choice of preſents, entreat them in a friendly manner to accept of them, and invite the chiefs on board the ſhips; to flatter them, give them medals to hang about their necks (which are delivered to you for the purpoſe); tell them, that theſe medals are a token of the laſting friendſhip of the Ruſſians; aſk and take from them what they chooſe to give as the like token; perſuade them to tell all their countrymen that the Ruſſians wiſh to be their friends; enquire their name, and the origin or meaning of it; whether their population is numerous, particularly in males; aſk concerning their religion; their idols (reſpecting which you muſt carefully obſerve that none of your Command go near or deſtroy them); their food and induſtry; where they travel, and by what means; how they call the places to which they reſort, and on what point of the compaſs they lie, whether iſlands or continent; and when they point out the ſituation with their hands, obſerve ſecretly, but accurately, the ſituation of the compaſs, and note in the journal how far diſtant; if you do not underſtand their meaſurement, aſk how many days' journey or voyage, that you may know how to keep your courſe, if you think it neceſſary to go there; alſo aſk if there are on ſuch coaſts or iſlands any conſiderable bays; whether large ſhips with one, two, or three maſts and ſails frequent them, or whether ſuch ſhips do not frequent their own or neighbouring iſlands, or coaſts? If you ſee in their hands any article of European or Aſiatic workmanſhip, aſk whence they had it; make all neceſſary obſervations for the deſcription of the place, and aſk their permiſſion to come often on ſhore; learn their cuſtom of ſaluting each other, and ſalute them ſo when you meet. When they come to like you for your friendſhip and generoſity, and you are ſure that they are not ſubject to any European power, then tell them that you have a mind to look out for ſuch other friends; and that they may permit you, as your friends in other places do, to erect a mark on ſome high place on ſhore, by which you may again find out the place where the friends of Ruſſians live, and that this ſhould be done, according to your cuſtom, with ceremonies; when they give this permiſſion, then order, upon one of the poſts prepared at Ochotſk, marked with the arms of Ruſſia, to be cut out letters indicating the time of diſcovery, a ſhort account of the people, their voluntary ſubmiſſion to the Ruſſian ſovereignty, and that this was done by your endeavours under the glorious reign of the Great Catharine the Second.

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You are empowered to name the iſlands and countries that you diſcover as you pleaſe, if they have no proper name. When the poſt is prepared, let the inhabitants know that you will come on ſhore to fix your mark, which you are to do with proper ceremony and precaution; after which make the inhabitants preſents of ſmall things which they like; and to the chiefs give medals, which they can hang about their necks; laſtly, perſuade the inhabitants, that if they chooſe to remain friends to the Ruſſians, they ſhould never permit either their own people or foreigners to dig out or ſpoil this mark, but preſerve it entire, as well as the medals hung about their necks.

Such trivial proceedings of ceremony have always had good effects with ſavages, and conqueſts made by theſe means have always been the moſt laſting.

ARTICLE XVII.

On ſurveying the iſlands, coaſts, and promontories, under Ruſſian ſubjection, you muſt, beſides the preſcribed information, acquaint yourſelf as accurately as poſſible with the number of male inhabitants in ſuch places, and begin collecting tribute from theſe people; but, in doing this, you are forbidden to uſe force, or even to revenge incivilities from ſavages; on the contrary, abſtain as much as poſſible from manſlaughter, even if they are ſo bold as to attack you, as the iſlanders of Alkutan, Oomnak, Oonalga, Accoon, and others, have often done to the Ruſſian hunters without any provocation; in ſuch caſes, remonſtrate with them through your interpreters; tell them, that they unreaſonably attack ſuch as wiſh to poſſeſs their friendſhip; promiſe and give them ſmall preſents; but order all your men to ſhew themſelves to as much advantage as poſſible from a diſtance, to frighten them, and prevent bloodſhed, which in ſuch caſes is almoſt unavoidable; explain to them, that, if they will not liſten to your kind behaviour, you are provided with ſuch terrible arms as at once will kill numbers of them, and which you will be compelled to employ if they will not be quiet; for it is impoſſible that there ſhould be any other reaſon for their uncivil and unfriendly behaviour to Europeans, than ſuperfluous precaution and fear on their ſide; and it is too often the fault of the adventurers, when they attack theſe people with fire and ſword, and bring them to a kind of deſpair; on the contrary, humane and friendly behaviour keeps them quiet; it is, therefore, ſtrongly recommended to you to proceed with them in this mild manner, and not to change your conduct till open and unavoidable danger compel you to ſhed blood; keep yourſelf in conſtant readineſs, however; employing your arms only to frighten, and not to deſtroy, theſe unhappy creatures, endeavouring rather to take one of them alive; and ſuch priſoner you may careſs, make him preſents, hang a medal about his neck, explaining to him, that by this you make him your friend, and will know him when he

comes to you again; keep him priſoner as ſhort a time as poſſible; and, when you releaſe him, give him neceſſaries, and perſuade him to tell his countrymen of your behaviour to him, and that he may return to the ſhip with whom he pleaſes, without fear; promiſing him, then, preſents of inſtruments for catching animals, or whatever he likes; and that he will be received in a friendly manner by all your people, if he only ſhews the medal about his neck.

When ſuch perſon comes to your ſhip with others, tell him, through interpreters, that the ſame arms which were before ſo alarming to them, will, if they chooſe it, be turned into harmleſs thunder, and ſerve as a mark of joy for the return of their friends.

You may then preſent them with ſuch things as are agreeable to them; treat them with brandy, ſugar, or tobacco, which moſt of them are fond of; give them likewiſe traps and gins, ſmall copper kettles, knives, needles, and nets, telling them the uſe of what they know not; and deſire them to bring you furs, oil of animals, fiſh, or what they have; mentioning alſo, that when others come with ſuch things, they will receive what they like. Having made them, by theſe means, deſirous of viſiting you, you lay a foundation for future collection of tribute; make them incline to trade, to be induſtrious in hunting, and more ſociable; and thus you will fulfil a principal point of your commiſſion, to the glory of Her Majeſty, and your own honour.

ARTICLE XVIII.

Sailing along the above-mentioned iſlands, coaſts, and promontories, which you are to deſcribe, when you come to Cape St. Elias, you may there, in Her Imperial Majeſty's name, declare yourſelf Captain of the Firſt Rank; and having made on this Cape ſuch obſervations as are enjoined for other places, if on your return, about the iſland Oonemak, or the point of Alakſa, ſuch weather ſhould ſet in as to render it unadviſable to keep the ſea on account of an approaching winter, you may ſearch for wintering on the iſlands of Oonalaſhka, the bay named by Captain-Lieutenant Levaſheff the harbour of St. Paul's, or lie in the iſland Oonemak, in the ſound oppoſite Alakſa, at one verſt and a half diſtant from Alakſa; and if not this, then go into any of the bays on the coaſt of Alakſa, to the eaſt or weſt, where, upon Captain Krenitzin's aſſurance, many fine bays may be found within 150 verſts. There, chooſing a ſafe and proper wintering place, begin immediately to build one or more huts on ſhore; uſe all manner of precaution againſt the ſcurvy, that you may not ſuffer as Captain Krenitzin did in wintering on this coaſt, who loſt about ſixty men in this diſorder, and was reduced ſo low, that, had not Captain-Lieutenant Levaſheff come with his people to his aſſiſtance, he would not have had people enow to manage

manage his ſhip. For your ſervice on ſhore, you may take ſome guns, cartridges, and ſmall ſhot; for the dreadful example of attacks of iſlanders upon the Ruſſian adventurers, which they tried alſo upon Captain Krenitzin when he wintered at Oonemak, muſt make you as cautious as Captain Krenitzin was, but chiefly againſt their night-attacks; he had four poſts for night watches; had guns and ſmall arms fired at ſtipulated times every few minutes, to frighten the ſavages, who tried more than once to overcome the guard, and kill him, with all his people. You muſt alſo endeavour, for your ſecurity, by fair means and preſents, to get the American chiefs to give you ſome of their children as hoſtages; to whom you will behave in a friendly manner; but do not take too many of them, that they may not incumber you, particularly if proviſions ſhould run ſhort. It is true, their parents uſed to bring them victuals; but it may happen that they will delay ſometimes, and then you muſt feed them on your own ſtock. You muſt order your Command, that ſuch as have been lately wounded, or have ſome internal diſorder, or ſuch as have even long ago had the venereal diſeaſe, ſhould not eat whale's fleſh; for the wounds will open again, and the venereal diſorder will be renewed within three days, as may be ſeen in Captain Krenitzin's journal.

When you are on the iſland Oonalaſhka, endeavour to deſcribe the inhabitants of it more accurately, and enquire of their migrations or origin; why they call themſelves Cogolach, as thoſe of the iſland of Oomnak call themſelves Kigigoos, and thoſe of Alaſka Cartagaeguk; for the name of Aleutes given to theſe iſlanders by the Pilot Nevotſhikoff, was taken by him from the name of the iſlands lying near Kamtſhatka. Alſo, when on the iſland Oonemak, look (for curioſity's ſake) to ſee whether the wooden croſs with a copper crucifix fixed in it, erected by Captain Krenitzin near his winter manſion, be ſtill exiſting. In a cut in this croſs, look for a paper left by him; it will ſerve you in your intercourſe with the iſlanders.

ARTICLE XIX.

If, during your navigation, it ſhould be neceſſary to repair your own ſhip, or if any accident ſhould render it unſerviceable, then you muſt go on board the ſhip commanded by the ſecond. Taking yourſelf the command, purſue in it your voyage and obſervations; in like manner, if the ſame ſhould happen to the ſhip of your ſecond, take him and his complement of men on board your own ſhip; for this reaſon, the officer commanding the ſaid ſhip ſhall be enjoined in his particular inſtructions never to ſeparate, or ſtay behind you, excepting at ſmall diſtance, or by your expreſs order; and that, ſhould this happen in a ſtorm, he ſhall endeavour as

ſoon

ſoon as poſſible to rejoin. For greater ſecurity, you muſt fix frequent rendezvous, that, in caſe of ſeparation, you may more conveniently join; and you muſt fix night and day ſignals for different accidents during your voyage. Should illneſs or other cauſes prevent your doing your duty, your ſecond is to take the command, and fulfil the tenor of your Inſtructions, of which he ſhall have on board his veſſel a copy ſigned by you, which you are to give him at your ſailing from Ochotſk.

ARTICLE XX.

As it frequently happens in thoſe ſeas, that in the month of October heavy fogs appear, which make it almoſt impoſſible to ſail without danger of loſing yourſelf, as it happened in 1767 in Captain Krenitzin's Expedition with all the ſhips, and particularly to the ſhip commanded by the Sturman Duding, which was wrecked on the 7th Kuril iſland, called Siaſhkuta, where not only the ſhip, but almoſt all the crew were loſt; you, therefore, and the Commander of the ſecond veſſel, muſt keep a good look out, particularly in unknown places, that no misfortune may happen to the ſhip or to yourſelf; which will be a loſs to the Treaſury, and a hindrance to Her Majeſty's intention.

ARTICLE XXI.

In all that relates to the ſervice of Her Imperial Majeſty, you are to conduct yourſelf as a good and experienced officer; and, as well as your ſubalterns, endeavour to deſerve the graces received, and future promiſes; for this reaſon you are to give your ſubalterns, whenever you employ them on ſeparate ſervices, clear and determined inſtructions, agreeing with the general inſtructions given to you; and oblige them thereby, as you yourſelf are obliged, to be reſponſible for faults and omiſſions, made purpoſely or through neglect.

ARTICLE XXII.

Having finiſhed your enquiries about the iſlands, &c. in a good time of the year, or if the ſtate of your crew, veſſels, and proviſions, make it adviſeable to hold out another year in thoſe ſeas, then you may take your courſe direct to Bering's Straits, to perfect the knowledge that you will have of the Tſhutſki coaſt, and try if you can get by ſea to the bay Tſhaoon, or the river Kovima, if by your firſt expedition to the Kovima you ſhall not have acquired ſuch perfect knowledge,

that all further trials may be uſeleſs. But ſhould you find the paſſage to the Kovima in large veſſels impracticable, then you may, when all that is preſcribed to be done in the Eaſtern Ocean, and about America, is accompliſhed, reach a harbour on the Tſhutſki coaſt; and, if it promiſe ſucceſs, land there with a neceſſary number of men and inſtruments, giving orders to the commanding officer that remains in the ſhips how long they are to wait for you (if you think it adviſeable to keep them there), and that afterwards they ſhall return to Kamtſhatka, or Ochotſk, where they are to expect your further orders. If the ſea ſhould be free from ice along ſhore, you may take ſome row-boats from the veſſels, giving, however, ſome to the ſhips; or build there baidars from materials prepared before; by the help of which, ſometimes by land and ſometimes by water, you will try to get round to the river Kovima, laying down your route upon the chart, and making neceſſary obſervations, chiefly for determining what is not yet ſettled on the charts.

But if, after theſe trials to the north, you return yourſelf in your frigates towards Kamtſhatka or Ochotſk, you may endeavour to make your return as uſeful to geography as poſſible, coaſting round the bay of Anadir, or touching at ſuch iſlands as you could not fetch in your firſt voyage.

ARTICLE XXIII.

At your arrival at the port of Kamtſhatka, and afterwards at Ochotſk, you have to return the Sturmen, Coſſacks, Interpreters, and Kamtſhadals, to their reſpective commands and places of abode in the government of Irkutſk, with written certificates of their behaviour, and recommendations for what each deſerves.

You will alſo deliver your veſſels, ſtores, ammunition, and proviſions remaining, by ſpecification, againſt receipt, to the Commander of Ochotſk; and if you can ſpare ſome inſtruments, without hindrance to the obſervations you may make on your return, you may alſo deliver ſuch againſt receipt for the future navigation of Ochotſk.

ARTICLE XXIV.

Having thus finiſhed your Chief Expedition, and collected your Command that is to return to St. Peterſburg, you are to make preparations without delay for your return, which make as uſeful as poſſible to the geography of the different parts of Siberia. With this view, you may ſend ſome of your ſubalterns with

with proper inſtruments on a different route; they might go with Mr. Patrin up the river Viluie, and from thence over the river Neizſhnoi or Pod-Kaminoi Tonguſka, to the river Jeneſei, to ſurvey the natural curioſities unexplored in thoſe parts. They would do ſervice to geography if they could obtain ſome knowledge of the advanced point which ſtretches farther than any other part of Siberia towards the Pole, between the rivers Olenek and Jeneſei, more eſpecially between the Katanga and Taimura; it may be, beſides, that you may have opportunities of determining or rectifying the longitude and latitude of remarkable places not ſpecified in the liſt annexed; you will likewiſe ſurvey remarkable rivers, which is not to be neglected.

ARTICLE XXV.

To conclude this Inſtruction, approved by Her Majeſty, that nothing may be wanting to encourage your zeal, Her Imperial Majeſty has been pleaſed to order the important truſt to be laid on you, of making alterations in what is preſcribed in the Articles, according to your judgment and circumſtances, with the common conſent of your officers; chiefly, however, when undoubted advantages may ariſe therefrom to the Expedition, for the good of the ſervice and the Empire. This great truſt will, doubtleſs, raiſe in your heart and thoughts a noble emulation of ſuch great men as have to their honour been employed in like ſervices as you are charged with; and will excite you to think only how you ſhall begin with zeal, purſue with good ſenſe, and end with honour, this important charge.

ADDITIONAL ARTICLE

To the Inſtructions of Captain-Lieutenant Billings.

On the chart oppoſite the river Kovima, to the north from Bear Iſlands, is marked the coaſt, which ſtretches as a continuation of the Continent of America. This has been adopted from a chart ſent by Governor Tſhetchirin in the year 1764. A ſergeant Andreeff ſaw from the laſt of the Bear Iſlands, at a very great diſtance, what they thought a large iſland, toward which they went with dog ſledges on the ice, but did not arrive at it by twenty verſts; they found freſh foot-ſteps of a great number of people who had been that way in rein-deer ſledges; but they, being few in number, returned to the Kovima. No later account of the large iſland, or continent, has been received; it is therefore thought neceſſary to make you obſerve this; as you will be on the river Kovima, and not far from thence,

thence, it would be uſeful if you could poſſibly ſurvey and deſcribe, or at leaſt get nearer accounts of the circumſtances of this land; whether it be an iſland or part of the continent of America; if there be inhabitants, and how great a number; in general, make all ſuch inquiries as are preſcribed concerning newly-diſcovered lands. This, however, is ſo recommended to your obſervation, as not to intrude on your chief occupation.

No. VI.

INSTRUCTIONS

FOR

THE NATURALIST, MR. PATRIN,

Who is ordered to accompany the Expedition deſtined for the Kovima and the Frozen Ocean.

[*The Original in French.*]

HER Imperial Majeſty having been graciouſly pleaſed to appoint you in quality of Naturaliſt, on a voyage of diſcovery about to be undertaken under the Command of Captain-Lieutenant Billings toward the Kovima, the Eaſtern and Frozen Ocean; every exertion is expected from you, which your honour, and your zeal for the ſciences which you profeſs, and for the ſervice you are engaged in, can prompt: the more ſo, as Her Majeſty, for your encouragement, has been pleaſed to give you one rank more than you now hold in the ſervice of the mines, to take place from the day on which you join the Expedition; likewiſe a ſum of rubles to defray the expences of your equipment; and double pay during the term of the Expedition; in which you will certainly have opportunities of making diſcoveries, and rendering ſervices, which will entitle you to the further protection of Her Imperial Majeſty.

In order to give you a full inſight into what is expected from you, Her Imperial Majeſty has been graciouſly pleaſed to approve the following articles, to ſerve for your inſtruction.

ARTICLE I.

Upon the arrival of Captain-Lieutenant Billings at Irkutſk, you will paſs from the ſervice that you are now employed in, to the Expedition under his command, with

with which you are to continue ſo long as it laſts, and with which you will return to St. Peterſburg; where you will give up your journals, obſervations, and collections, together with ſuch ſpecimens of natural hiſtory as you may have collected, to the department which Her Imperial Majeſty will name for their reception.

ARTICLE II.

You are to follow the Commander of the Expedition in all his journies by land and voyages by ſea, beyond the river Lena; and you will aſſiduouſly obſerve all that is preſcribed in theſe inſtructions; particularly in thoſe parts of Siberia, as well as coaſts and iſlands, which have never been viſited by naturaliſts; ſuch as the banks of the Kovima, the coaſts of the Frozen Ocean of the Pacific, and Kamtſhatka, and the iſlands you will there touch at. You will keep an exact journal of the voyage, together with a topographical deſcription of the countries that you are to paſs through, their rivers, lakes, and mountains; the productions in the three kingdoms of nature, and the inhabitants. You will alſo make meteorological obſervations, and remarks upon the ſeveral properties of the countries that you may viſit, from the beſt intelligence you can collect.

ARTICLE III.

You will deſcribe in a very particular manner the extent, connexion, and direction, of the chain of mountains; their ſhapes, ſuperfices, declivities, and heights; the rocks or ſoils of which they are compoſed; the ſtrata that they contain, and their direction; craters, remains of extinguiſhed volcanoes, and ſuch as are actually burning. You are to collect ſpecimens of all ſorts of rocks, earths, petrifactions, lava, foſſil, remains of animals, minerals, ſalts, and ſulphurs; carefully numbering them, and noting the ſpot where found; alſo collect all remarkable ſtones and pebbles brought down by rivers, or thrown up by the ſea, as well as ſuch as may be in uſe by the inhabitants.

You will deſcribe the ſurface of the country, its irregularities, and the layers of ſoil found at different depths; the ſituation of the country, whether low or elevated; woods and underwoods, animals, birds, marſhes, lakes, rivers great and ſmall, the nature of the waters, eſpecially if they appear to have any particular qualities, the fiſh found in them, and every other remarkable production.

ARTICLE IV.

With regard to the people that you may viſit, you will obſerve their diſpoſitions and different corporeal qualifications; their government, manners, induſtry, ceremonies, and ſuperſtitions religious or profane; their traditions, education, and manner of treating their women; uſeful plants, medicines, and dyes; food, and manner of preparing it; habitations, utenſils, carriages, and veſſels; manner of life and economy; their modes of hunting, fiſhing, making war, and treatment of domeſtic animals; likewiſe languages, of which you will collect vocabularies, according to the plan ſent with the Expedition, marking the pronunciation according to the Latin orthography. You will alſo try to procure the dreſſes, ornaments, inſtruments, and arms of theſe people, or cauſe them to be drawn. You will likewiſe make deſcriptions of tombs and other monuments of antiquity.

ARTICLE V.

You will particularly attend to trees, ſhrubs, land and water plants; preſerving as many ſpecimens as poſſible, particularly of any that are extraordinary or new; and you will employ your leiſure time in making complete deſcriptions of ſuch ſpecimens; noting the ſeaſon of their growth, flowering, and maturity. You will loſe no opportunity of remarking moſt minutely ſuch as may be of benefit to ſociety, and which you may diſcover to be of uſe as food for man or beaſt, or applied as a remedy for any diſorder; the manner of preparing dyes, ſtuffs, or ſkins. You will collect ſpecimens of woods, barks, gums, reſins, remarkable fruits, bulbs, and roots; as alſo every thing that may be cultivated in the gardens of Europe, noting the provincial and natural names.

ARTICLE VI.

You will collect, and cauſe to be ſtuffed or otherwiſe preſerved, all extraordinary quadrupeds, birds, fiſh, amphibious animals, inſects, ſhell-fiſh, or zoophytes; obſerving as cloſely as poſſible their habits, food, propagation, ſounds, migrations, and habitations, as well as the mode of catching them, with the inſtruments and ſtratagems made uſe of for that purpoſe. You will alſo collect as many ſpecies of birds' eggs as poſſible. Quadrupeds and birds of different genders and ages are to be ſtuffed; fiſh, amphibious animals, and zoophytes, to be preſerved in ſpirits of wine; inſects, ſhells, and dried productions, fixed or packed up in caſes made for that purpoſe.

ARTICLE VII.

Meteorological obſervations, particularly thoſe with the thermometer and barometer, demand your ſtricteſt attention; but moſt ſo in the places where you may winter or ſtay any time. You will form tables of theſe obſervations in the uſual manner, noticing all remarkable phenomena, ſuch as Parhelii, Aurora Boreales, and their concomitant circumſtances; obſerve the congelation of mercury in different manners by natural and artificial cold; and determine by the ſpirit thermometer the true point of congelation. The altitude of different mountains may be determined by correſponding barometrical heights.

Although the predominant or variable winds, tides with their changes and directions, currents, and other nautical occurrences, are the more particular buſineſs of the Commander, you will not neglect to make ſuch obſervations as you can, and note them in your journal.

ARTICLE VIII.

You will inform yourſelf of all national illneſſes, eſpecially endemic or epidemic, which exiſt in particular latitudes, or among particular nations; the diſtempers of domeſtic animals and horned cattle; and the remedies moſt in uſe to prevent or eaſe them.

ARTICLE IX.

You will be careful in preſerving the natural curioſities that you may collect, numbering them, and keeping a catalogue containing the places where found, with deſcriptions and other obſervations; or all this may be expreſſed on each label. The ſtuffed birds or animals muſt be carefully dried, and ſmoked with ſulphur, before they are packed up; the boxes or packages dried and ſmoked in like manner, and the caſes covered with pitch and with leather. To every article likely to be ſpoiled by inſects or damp, particular attention muſt be paid. When the Commander makes his reports, you will alſo ſend your obſervations, and ſuch collections as are convenient; the others are to remain in your cuſtody till your return to St. Peterſburg.

ARTICLE X.

You may require from the Commander of the Expedition ſuch aſſiſtance of men, horſes, inſtruments, and money, as may be neceſſary for your phyſical operations; and when your preſence is not neceſſary with the Expedition, you may make excurſions, with the Commander's conſent, into the neighbouring country, where you may expect to meet with objects worthy of your remarks, either phyſical or hiſtorical. You will receive every aſſiſtance for this purpoſe from the Commander of the Expedition; and the draftſman may accompany you if he be not employed on more important buſineſs.

(Signed) P. S. PALLAS.

No. VII.

EXTRACTS

AND

SUPPLEMENTARY OBSERVATIONS.

The following Remark was made in Captain Billings's Journal, by his order, while at Oonalaſhka in 1790, on the Iſland Sithanak.

" In conſequence of complaints made to me in form, upon my firſt arrival at " Ochotſk, by ſeveral people who were ſent by Government to collect tribute of " the Aleutan iſlanders, againſt the hunters, for cruelties to the natives, I repre- " ſented the ſame, and received a private Mandate from Her Imperial Majeſty, " ordering me to inſpect the behaviour of the merchants and hunters in theſe parts. " I have, in conſequence, made it my buſineſs at Sithanak and Oonalaſhka to make " enquiries into the treatment which the natives receive from theſe people; and " have been, as well as every gentleman on board, an eye-witneſs of the abject " ſtate of ſlavery in which theſe unfortunate iſlanders live under the Promyſh- " lenicks (hunters). The company now at Oonalaſhka conſiſts of twelve Ruſſians " and one Kamtſhadal (their veſſel is in the ſtraits of Alakſa or thereabouts). Theſe " people employ all the men of Oonalaſhka and Sithanak in the chaſe, taking the " fruits of their labour to themſelves, and not even allowing the natives neceſſary " clothing. There is, therefore, no name ſo dreadful to them as that of Peredof- " ſhick (the leader of a gang of hunters). Upon the arrival of their veſſel at any " place where they purpoſe making a ſtay, they haul her on ſhore; immediately " ſend the natives out on the chaſe, even to the fartheſt of Shumagin's iſlands; " and then take by force the youngeſt and moſt handſome of the women for their " companions.

" If another veſſel arrives, they unite their companies, or elſe the ſtronger " party takes the natives from the weaker. They inflict on the natives what " puniſhments they pleaſe, and are never at a loſs to invent a cauſe."

TRANSLA-

TRANSLATION

Of a part of the Journal of one of our Ruſſian Officers while at Oonalaſhka in 1790.

"The company of hunters now here make their boaſt that they clothe and feed "the iſlanders; which they do in the following manner: The natives, being under "their controul, are ſent out in parties to chaſe ſea animals and catch fiſh. The "produce of the chaſe is delivered into the Company's ſtock, out of which the "natives receive an allowance. Such of the inhabitants as are too infirm or too "young to be ſent out on aquatic excurſions, are employed in domeſtic drudgery, "and digging edible roots; while the women are occupied in making and mending "clothing from the inferior ſkins of animals and of birds."

"The hunters were accuſtomed to act as follows: Upon the arrival of any "veſſel at an inhabited iſland, the Peredofſhik ſent an armed boat to the habitations, "to take from the natives all the furs and valuable articles that they poſſeſſed; "and, if the leaſt oppoſition was made, they were ſilenced by the muſkets of the "hunters. Wives were taken from their huſbands, and daughters from their "mothers; indeed the barbarity of their ſubduers to the crown of Ruſſia is not "to be deſcribed. They uſed not unfrequently to place the men cloſe together, "and try through how many the ball of their rifle-barrelled muſket would paſs *. "Nor were the hunters more kind to their own brethren; for if two parties in "different intereſts met, they fought together for the poſſeſſion of the natives, or "formed themſelves into one company."

A Bird of the Auk kind caught at Oonalaſhka.

Bill orange colour, very little curved; both mandibles tipped and edged with black; the noſtrils long and narrow, running parallel with the mouth; an elevation upon the noſtrils of a light green colour, edged with black. The feathers commence at the baſe of the bill, and are of a dark aſh, which is the colour of the head and neck. From the upper part of the eye, along the head, to the back of the neck, is a row of fine white ſatin feathers; and another row, broader and ſhorter, leads from the corners of the mouth. The eye of a pale yellow, the pupil being ſmall and of a very dark blue. The back, ſcapulars, coverts of the wing, and tail,

* Gregory Shelikoff has been charged with this act of cruelty; and I have reaſon to believe it, from the teſtimony of ſeveral Ruſſians at Ochotſk, corroborated by ſome of the natives of this iſland.

are dark, with a paler edging; primaries ſomething lighter; throat a light colour; breaſt and belly a dirty white; the fore part of the legs of a livid colour; the hind part, web, and claws, black, with three toes. It reſides about the rocks and coaſt of Kamtſhatka, and upon all the Aleutan iſlands, and is about the ſize of a black-bird.

Fiſh caught at Oonalaſhka, March 23, 1792.

Angling among the rocks, the hook baited with the common edible muſcle, I caught a fiſh called by the Ruſſian hunters *terpug* (*raſp*). It is ſixteen inches long, and ſhaped like a mackerel. The head of a dark olive, with ſcarlet ſpots. Behind each eye, on the top of the head, is a palmated fleſhy creſt half an inch long, and one-eighth broad. It has five branchioſtigous rays, prominent and ſtrong; theſe and the lower part of the head are of a lively ſcarlet. The colour of the body of the fiſh is dark olive, with blotches of ſcarlet, and a dull red; two dorſal fins ſpotted in the ſame manner, and united at the extremities; both rounded; the firſt conſiſts of twenty rays, the ſecond of twenty-two. The pectorals large and rounded, eighteen rays, ſpotted at the dorſal, but edged with ſcarlet, as is alſo the anal fin, conſiſting of twenty-two rays; ventral five rays; tail rounded; breaſt and throat a lively ſcarlet. On each ſide of the breaſt is a line of ſmall dots, reaching between the ventral and pectorals, turning up to the latter, and extending in a ſtrait line to the tail, very high on the back; a ſimilar line encircles the dorſal fin, there is another half an inch below it, and one near the ventrals. The fleſh, gills, and inſide of the mouth, are of a lively light blue, inclining to green; when boiled it turns white, but the bone retains ſomewhat of this colour. The ſcales are ſmall and rough, whence it derives its name.

The ſame day I caught another fiſh, about ſeven inches long; head large, but ſhort; the ſides of the bony plates and head replete with ſmall pits; large mouth, with ſharp cloſe-ſet ſlender teeth. The dorſal fin reaches from the hind part of the head to near the tail, which is rounded. The fiſh is very ſmooth; its colour a dark olive marbled with duſky green, edged with a dull red, forming broad bars that croſs the lateral line, which is ſtraight.

A very black fiſh reſembling a carp I frequently caught lurking under ſtones; as alſo the father-laſher. The armed bull-head alſo was caught in our net, and the ſpotted blenny.

I took one fiſh which adhered very faſt to a rock by means of a ſucker on its belly. It is very ſhort and thick, and the fleſh flabby; but it boiled firm.

I alſo found a fiſh lying dead on the beach, about five feet long, round, and ſhaped like an eel, with a large mouth, and very ſharp teeth.

The other kinds of fiſh are, halibut, cod, thornback, and ſeveral ſpecies of ſalmon.

THE END.

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